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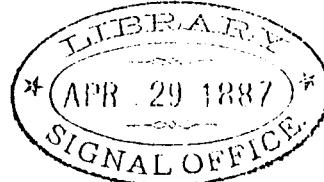
OBSERVATIONS AND RESEARCHES

MADE AT

THE HONGKONG OBSERVATORY,

IN THE YEAR

1886.-1887



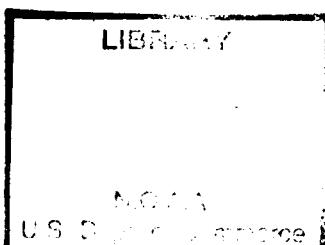
BY

W. DOBERCK,

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GOVERNMENT ASTRONOMER.

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1887.

National Oceanic and Atmospheric Administration

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September 14, 1999



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HONGKONG OBSERVATORY,

31st August, 1887.

SIR,—For the information of His Excellency the Officer Administering the Government, I have the honour to forward my Annual Report for 1886.

2. The second volume of Observations and Researches made in 1885, was published early in the summer of 1886, and the third volume containing those made in 1886 was published early this year. In the whole, the arrears of work have been wiped off, and the observations and calculations are finished up to date as far as possible. This is to a great extent due to the appointment of an additional Clerk last spring, when it was found that the *China Coast Meteorological Register*, researches concerning typhoons and similar meteorological work of importance to the shipping could not possibly be continued by the staff at that time attached to the Observatory, the funds of which were calculated on making and investigating only local observations.

3. A pamphlet on the *Law of Storms in the Eastern Seas*, adapted for the use of the shipping, and embodying practically all that is now known about typhoons, was issued in September last.

4. It was decided to reserve the typhoon-gun for announcing the approach to the Colony of a typhoon, the purpose for which it was originally procured and mounted at Tsim-shat-sui under my superintendence.

5. During the year Mr. F. G. FIGG attended, aided by Mr. MAHOMED ALARAKIA, to the self-recording meteorological instruments and the printing of the *Monthly Weather Reports*, with the exception of the thermometric and hygrometric observations, which were done under my immediate superintendence. For some time during the year, the iron method was used in the development of the photographic records, but this was discontinued in favour of the pyrogallic acid developer which gives much superior results in this climate.

6. The results obtained by comparison of thermometers exposed in STEVENSON's screen with the true air and damp bulb temperatures, showed the temperature in the screen to be generally a little too low during the night, a fact that would scarcely be noticeable in a temperate and dry climate where the temperature falls so quickly during the early part of the night. Thermometers exposed in a wooden screen lagging behind the true air temperature would therefore more likely read too high, but in Hongkong where the temperature falls so very slowly during the night, and is even frequently rising little between sunset and 10 p.m., the readings depend solely on the exposure of the thermometers. Thermometers exposed in an unpainted wooden screen placed on an open grass plot would perhaps read slightly too high in the evening even in a tropical climate, and from experience gained here, I could suggest this as a most satisfactory exposure of thermometers for ordinary use. A metallic screen causes the thermometers to read too low during the night. The STEVENSON Screen being covered with a thick coating of white lead partakes of the nature of a metallic screen, as white lead has the same radiating power as lamp black according to *Leslie*.

7. A parliamentary grant of a hundred pounds has at the recommendation of the Royal Society, been allowed for making observations sufficient to construct new tables for calculating the relative and absolute humidity from observations made with rotating thermometers in Hongkong. Their readings have been found to agree with the indications of the sling thermometer, but the latter is somewhat sluggish.

8. The daily weather intelligence was issued with the assistance of Mr. LAU SHAU, First Clerk, as explained in the *Annual Administrative Report for 1884*, but it is to be apprehended that the telegraphic communication between the Observatory and the Central Police Station in Hongkong, will break down during the approach of a typhoon, at a time when there is no boat communication with the other side of the harbour, and when intelligence issued from here might be particularly valuable.

9. It would be nearly impossible to speak in adequate terms of the Eastern Extension and the Great Northern Telegraph Companies that so courteously transmit the extensive system of meteorological messages free of charge through their cables. The cost of transmission is, as far as I know, everywhere else, by far the heaviest item in the cost of meteorological offices, and for this reason the earnings in connection with West India hurricanes are perhaps behind ours.

10. The meteorological stations belonging to the Imperial Maritime Customs of China have been extended and further improved. Their monthly reports together with returns received from men-of-war both British and foreign and also from merchant vessels, through the kind co-operation of the Honourable Captain THOMSETT, Harbour Master, &c., furnish data which are perhaps unequalled in extent and accuracy for investigating tropical storms.

11. The telegraphic connection between the mean-time clock at the Observatory and the Time ball at Tsim-sha-tsui was rejected, and the construction of an underground line suggested by me in July 1886. The construction of an aerial line was subsequently approved by His Excellency the Acting Governor, and this was carried out by the Eastern Extension, Australasia and China Telegraph Company, Limited. This has worked without failure.

12. The Sidereal Standard Clock was kept going without being touched except for winding throughout the year. As soon as two years' ten-day rates are available, it is intended to re-examine the co-efficients. A second standard clock with mercurial compensation would be a valuable addition to the astronomical outfit.

13. Micrometric measures of Jupiter and Saturn have been reduced and published in the Astronomical Report, and progress has been made in the reduction of Double-Star Observations.

14. The Astronomical activity of the Observatory was extended by the erection of Sir WILLIAM THOMSON's tide-gauge in October last in the tidal observatory built in the Police Boat-basin at Tsim-sha-tsui, and the continuous record was commenced at the end of that month. It is intended to tabulate the readings at the end of a year.

15. The absolute magnetic observations were made as usual once a month which has been found quite sufficient. In view of the fact that an immense material consisting of unreduced continuous magnetic records has accumulated at several other Observatories, it would be of perhaps doubtful advantage to multiply such observations, the practical utility of which is probably as yet far distant before the existing records have been discussed in an exhaustive manner and published by scientific authorities.

16. Considerable difficulty has been and will in future be experienced, owing to the resignation of the native assistants. On leaving school they join the staff and get a special training for the work only to retire for some other branch of the service where they expect some prospect of rapid advancement. This makes the work harder on the assistants that remain, as a newcomer is for a considerable time nearly useless. This difficulty would be obviated by the appointment of a junior assistant thoroughly trained in England. I am confident that a second assistant could be obtained from the Kew Observatory for eighty dollars a month and quarters, and that he would discharge the duties of the second assistant and second clerk at this Observatory better than can be reasonably expected from two young native clerks, who have not been specially educated for scientific work, and I would venture to respectfully submit this for His Excellency's consideration in the event of vacancies occurring in both appointments.

17. All further details in connection with the different branches of the work of this Department are published fully in the respective reports and the usual annual report was inserted in the annual report of the Royal Astronomical Society.

I have the honour to be,

Sir,

Your most obedient servant,

W. DOBERCK,
Government Astronomer.

To the Honourable

THE ACTING COLONIAL SECRETARY,

&c.,

&c.,

&c.

REPORT ON THE TIME-SERVICE IN 1886, AND MICROMETRIC
MEASURES OF PLANETS.

The transit-instrument was throughout the past year used exclusively for ascertaining the error of the sidereal standard clock. The number of transits observed was 193, and the inclination of the axis was determined 65 times. The azimuthal deviation was whenever necessary corrected by aid of the distant meridian-mark, but this as well as any outstanding error of collimation was eliminated by observing objects very near the zenith,—one passing the meridian south and the other north of the zenith,—and reversing the instrument before the transit of the second star. The inclination cannot be similarly eliminated without using an artificial horizon, but this is not practicable as zenith-stars could not be observed reflected from the mercury,—whence the necessity for levelling every night when transits are secured except occasionally for a few nights, if the temperature is quite constant. The inclination affects the observed clock-error with fully its whole amount, but of course the factor is smaller within the tropics than in a higher latitude.

The sidereal standard clock has been going without interruption since the beginning of September, 1885, since which epoch the case has not been opened nor the hands touched. It is intended that the rate should be altered in another year. The mean daily rates during ten-day periods are exhibited in the following table, where — means gaining rate.

RATE OF SIDEREAL STANDARD CLOCK IN 1886.

	Period.	Rate.	Temp.	Bar.		Period.	Rate.	Temp.	Bar.
1886.									
January	26- 5,.....	-0.86	62°.9	30.18	July	4-14,.....	-2.78	81°.3	29.72
"	5-15,.....	0.78	63 .1	.12	"	14-24,.....	2.92	80 .2	.63
"	15-25,.....	0.86	62 .9	29.92	"	24- 3,.....	3.09	82 .6	.62
February	25- 4,.....	0.78	56 .2	30.01	August	3-13,.....	3.24	83 .3	.66
"	4-14,.....	0.55	55 .7	.03	"	13-23,.....	3.28	83 .0	.56
"	14-24,.....	0.58	55 .8	.12	"	23- 2,.....	3.27	80 .5	.71
"	24- 6,.....	0.81	60 .1	.01	September	2-12,.....	3.26	80 .3	.71
March	6-16,.....	1.04	62 .4	29.97	"	12-22,.....	3.23	81 .6	.69
"	16-26,.....	1.28	66 .5	.91	"	22- 2,.....	3.25	79 .3	.83
"	26- 5,.....	1.42	64 .8	.92	October	2-12,.....	3.14	79 .2	.80
April	5-15,.....	1.73	71 .5	.82	"	12-22,.....	3.09	77 .2	.88
"	15-25,.....	1.78	68 .9	.83	"	22- 1,.....	3.11	77 .5	.95
"	25- 5,.....	1.79	70 .1	.89	November	1-11,.....	2.80	72 .3	30.03
May	5-15,.....	1.95	72 .9	.79	"	11-21,.....	2.77	70 .5	.00
"	15-25,.....	2.26	79 .2	.79	"	21- 1,.....	2.55	69 .1	.05
"	25- 4,.....	2.38	78 .9	.74	December	1-11,.....	2.41	64 .7	.12
June	4-14,.....	2.52	80 .0	.64	"	11-21,.....	2.17	62 .0	.06
"	14-24,.....	2.57	79 .7	.70	"	21-31,.....	2.15	60 .4	.07
"	24- 4,.....	2.70	82 .9	.70					?

The chronometers are compared on Mondays and Saturdays shortly before 1 p. The first named chronometer was used only as a hackwatch. Their daily rates (+ means losing, — gaining rate) were as follows:—

Period.	Rate of Chronometer Dent No.			Temper- ature.	Period.	Rate of Chronometer Dent No.			Temper- ature.		
	39946	40912	40917			39946	40912	40917			
1886.											
January	4- 9...	+3°.40	-3°.70	-3°.02	61°	July	5-10...	+6°.60	-3°.20	-3°.10	81°
"	11-16...	1.42	4.16	3.02	63	"	12-17...	7.76	3.38	2.94	81
"	18-23...	3.78	3.96	2.64	63	"	19-24...	7.96	3.52	3.20	81
"	25-30...	3.50	5.24	3.36	60	"	26-31...	6.74	2.88	3.16	82
February	1- 6...	2.48	4.12	3.90	54	August	2- 7...	8.12	3.68	3.32	83
"	8-13...	4.76	4.72	3.52	56	"	9-14...	7.78	2.98	3.62	83
"	15-20...	5.02	4.10	3.52	56	"	16-21...	7.94	2.96	3.48	83
"	22-27...	3.22	4.80	3.12	57	"	23-28...	7.84	3.78	3.56	80
March	1- 6...	5.34	3.30	4.14	62	"	30- 4...	7.78	3.58	3.72	81
"	8-13...	5.04	4.62	4.02	62	September	6-11...	5.06	4.64	4.78	79
"	15-20...	5.90	4.00	3.66	66	"	13-18...	3.02	3.80	3.58	80
"	22-27...	5.08	4.22	3.68	65	"	20-25...	2.02	3.76	2.14	81
"	29- 3...	7.90	4.68	3.64	66	"	27- 2...	0.54	4.18	3.20	79
April	5-10...	7.04	3.04	2.82	71	October	4- 9...	6.02	4.00	2.38	78
"	12-17...	7.10	3.28	2.78	71	"	11-16...	5.40	3.50	2.68	78
"	19-24...	3.72	3.68	2.70	69	"	18-23...	4.86	3.58	2.78	78
"	26- 1...	3.64	3.88	2.38	69	"	25-30...	7.82	3.70	3.32	78
May	3- 8...	8.60	5.32	2.32	72	November	1- 6...	1.92	3.60	3.60	72°
"	10-15...	7.40	4.20	2.28	75	"	8-13...	1.26	4.90	3.00	72
"	17-22...	5.62	3.18	2.00	80	"	15-20...	3.14	4.94	2.78	70
"	24-29...	8.40	3.68	2.14	79	"	22-27...	5.64	5.36	3.18	69
"	31- 5...	5.58	3.60	2.22	79	"	29- 4...	6.36	5.02	3.18	67
June	7-12...	5.12	2.98	2.56	80	December	6-11...	8.20	5.34	3.62	63
"	14-19...	5.76	3.54	2.56	78	"	18-18...	3.56	5.34	3.92	61
"	21-26...	7.92	3.82	2.86	82	"	20-25...	4.46	5.34	4.06	61
"	28- 3...	8.24	3.54	2.84	83	"	27- 1...	6.92	7.00	4.08	61

Between the 8th June, 1883, and the same date of 1884, the mean daily rate of Dent 40912 was: +0°.45. In 1885, it was: -1°.88, and in 1886: -4°.06. Between the 8th June, 1883, and the same date of 1884, the mean daily rate of Dent 40917 was: -1°.73. In 1885, it was: -1°.52, and in 1886: -3°.27.

The following table exhibits the errors of the one o'clock signals in 1886, for every day on which the ball was dropped. Whenever the error was less than 0°.15, 0.1 has been entered without sign:—

ERRORS OF TIME BALL IN 1886.

—means too late, + means too early.

Date	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	...	-1.0	+0.5	+0.3	0.1	0.1	+0.2	..	-0.2	0.1	0.1	-0.3
2	-0.4	-1.0	+0.7	+0.5	...	0.1	+0.3	...	-0.2	0.1	-0.2	0.
3	...	-0.4	+0.9	+0.8	+0.2	+0.2	+0.4	+0.3	-0.3	...	...	0.1
4	0.1	...	0.1	...	+0.3	+0.2	...	+0.4	0.1	0.1	...	0.1
5	-0.2	-0.2	+0.2	+1.3	+0.2	+0.2	0.1	+0.6	...	0.1	...	...
6	0.1	+1.0	+0.4	+0.9	+0.4	...	0.1	0.1	+0.2	0.1	...	0.1
7	0.1	...	...	0.1	+0.6	+0.4	+0.2	0.1	...	+0.2	...	0.1
8	0.1	0.1	+0.4	+0.4	+0.8	+0.6	+0.2	...	0.1	+0.3	...	-0.
9	0.1	0.1	+0.6	+0.6	...	0.1	+0.3	+0.2	0.1	0.1	...	-0.
10	...	0.1	0.1	+0.8	+1.2	0.1	0.1	+0.3	0.1	...	...	0.
11	0.1	0.1	0.1	...	+1.4	+0.2	...	+0.4	0.1	0.1	...	-0.
12	+0.2	0.1	+0.2	+0.2	+1.6	+0.3	0.1	+0.5	...	+0.2	0.1	...
13	+0.2	0.1	+0.3	+0.2	+0.5	...	0.1	0.1	-0.3	+0.2	0.1	0.
14	+0.2	...	...	+0.3	+0.2	...	+0.2	0.1	-0.4	+0.3	...	0.
15	0.1	+0.2	+0.5	+0.4	+0.4	+0.5	+0.3	...	-0.6	+0.3	0.1	0.
16	0.1	+0.2	+0.6	+0.5	...	0.1	...	0.1	+0.4	0.1	0.	0.
17	...	+0.2	0.1	+0.6	+0.7	0.1	...	0.1	+0.2	...	0.1	-0.
18	+0.2	+0.4	+0.4	...	0.1	-0.2	...	+0.2	+0.3	0.1	0.1	0.
19	+0.3	+0.4	+0.7	+0.7	+0.3	-0.3	...	+0.2	...	-0.2	-0.5	...
20	+0.4	+0.4	0.1	+0.8	0.1	...	0.1	0.1	+0.5	-0.3	-0.2	0.
21	+0.5	...	...	+0.9	0.1	0.1	+0.2	0.1	+0.7	0.1	...	0.
22	+0.5	+0.6	0.1	+1.0	0.1	+0.2	0.1	...	0.1	0.1	-0.3	0.
23	+0.5	+0.7	+0.2	...	...	+0.3	0.1	0.1	0.1	+0.2	-0.4	0.
24	...	+0.8	+0.3	+1.1	0.1	+0.5	0.1	0.1	0.1	...	-0.6	...
25	+0.3	+0.8	+0.4	...	0.1	+0.6	...	0.1	0.1	+0.4	+0.4	...
26	+0.5	0.1	+0.5	...	0.1	+0.7	0.1	0.1	...	+0.6	0.1	...
27	+0.7	0.1	+0.5	0.1	0.1	...	+0.2	0.1	0.1	+0.8	0.1	...
28	+0.9	...	...	0.1	+0.2	0.1	0.1	0.1	-0.2	0.1	0.	0
29	+1.1	...	+0.7	0.1	+0.2	0.1	0.1	...	-0.4	-0.2	0.1	0
30	0.1	...	+0.8	0.1	...	+0.2	0.1	0.1	0.1	-0.4	-0.2	0
31	...	...	+0.9	...	0.1	0.1	-0.2	...	...	...	...	0

The probable errors of the signal in the different months of 1886 (with the average percentage of clouded sky added in parenthesis) were as follows :

January 0.[°]27 (65), February 0.[°]34 (96), March 0.[°]36 (92), April 0.[°]46 (82), May 0.[°]34 (71), June 0.[°]22 (76), July 0.[°]14 (76), August 0.[°]16 (71), September 0.[°]20 (51), October 0.[°]20 (48), November 0.[°]18 (35), December 0.[°]13 (31).—The mean of the probable errors was 0.[°]19 in 1885 and 0.[°]25 in 1886, and the probable error of the signal during the two past years was therefore about a fifth of a second.

As stated in the time-ball notice published in the *Government Gazette* on the 10th January 1885, the ball is not dropped on Sundays or on Government Holidays. On the 30th March it failed at 1 p (clock failing to make contact) but was dropped at 2 p. On the 15th July it failed at 1 p (the telegraph wires being entangled) but was dropped at 2 p. On the 16th, 17th and 19th the ball could not be dropped as the wires were entangled. On the 7th September it failed owing to defective telegraphic connection and also at 1 p on the 8th, but it was dropped by hand at 2 p on the latter date. The ball was dropped by hand from the 9th September till the 2nd November. From the 3rd till the 11th November the signal was not given owing to illness among the staff. Since the 12th November the ball was dropped without intermission by aid of excessive battery-power introduced with the sanction of the Governor.—It is seen, that the time-ball apparatus failed to act only once in 1886, that the telegraphic connection was the cause of failure on 15 days and that the ball was dropped by hand on 47 days. I reported in July the necessity for a new line and this has been approved by His Excellency.

MICROMETRIC MEASURES OF JUPITER.

Epoch.	Pos.	m	n	M.P.	Diameter.		Breadth.		Length.		Obs.—Calc.		
					Equ.	Pol.	Belt	Spot	Spot	Pos.	Equ.	Pol.	
1879	August 29,...	335°.65	+0°.17	4	200	...	...	...	...	-0°.20	...	...
	" November 24,...	336 .53	.42	5	"	...	...	...	...	+.07	...	...
	" " 29,...	336 .30	.05	2	"	...	...	2°.42	11°.87	-.09	...	...
	" December 19,...	336 .65	.32	4	"	...	...	...	...	+.65	...	...
1880	September 12,...	336 .23	.10	4	"	...	...	...	...	+.25	...	...
	" 27,...	335 .25	.30	4	"	...	...	8 .39	15 .55	-.49	...	...
	" October 21,...	334 .98	.33	4	"	50°.17	47°.25	9°.13	3 .62	14 .89	-.39	+1°.13	+1°.29
	" " 23,...	335 .35	.00	3	"	49 .61	46 .84	8 .19	3 .35	15 .79	.00	+0 .68	+1 .00
	" " 28,...	335 .13	.17	4	"	48 .99	46 .24	8 .48	3 .59	...	-.15	+0 .46	+0 .73
	" November 3,...	334 .47	.13	4	"	49 .35	46 .05	8 .78	...	...	-.75	+1 .39	+1 .03
	" December 1,...	336 .05	.23	4	"	45 .25	42 .23	7 .79	...	...	+.97	+0 .97	+0 .45
	" " 3,...	334 .73	.04	4	"	44 .69	42 .38	8 .86	...	...	-.35	+0 .71	+0 .87
	" " 6,...	335 .37	.17	4	"	43 .54	42 .20	8 .88	...	...	+0 .30	-0 .01	+1 .09
	October 26,...	359 .93	.50	4	"	43 .70	41 .09	...	...	...	-1 .57	+0 .61	+0 .46
1881	December 7,...	359 .30	.30	4	400	47 .26	44 .43	...	...	...	-0 .54	+0 .14	+0 .29
	January 6,...	356 .95	.30	4	200	47 .63	44 .63	...	...	...	-1 .06	+1 .12	+1 .03
1882	" 8,...	354 .45	.70	4	200	47 .41	45 .24	...	...	...	-3 .45	+1 .05	+1 .78
	December 27,...	23 .60	0 .91	7	110	...	...	...	...	...	-1 .64	...	...
	" 28,...	25 .84	1 .34	8	"	...	...	...	...	...	+0 .62	...	...
1886	April 7,...	24 .40	0 .28	4	"	...	...	...	...	...	-1 .00	...	...

The distance of the great ruddy spot from the nearest edge of the belt was measured on October 21st, 1880, as 3".63, and on October 23rd, as 3".53. The satellites were measured on November 3rd, 1880, as follows : I 1°.00, II 1°.18, IV 1°.30.

The first column in the table exhibits the epoch, the second the angle of position of the polar axis, the third the average deviation of the single measures from the mean (from which the probable error is easily obtained), the fourth the number of pointings, the fifth the magnifying power, the sixth the apparent diameter of the equator, the seventh the diameter vertical to the latter, the eighth and ninth the breadth of the equatorial belts and the great spot, the tenth the length of the latter when on the central meridian. The eleventh, twelfth and thirteenth columns exhibit the differences between the observed values and those calculated by Marth, in which comparison the phase has been taken into account as usual.

From the differences exhibited in the eleventh column the following normal values of the position angle were obtained : I 1880, July 3rd, 335°.95. II 1882, December 14th, 357°.96. III 1886, February 7th, 24°.56. From I and III the right ascension and declination of Jupiter's North-pole were determined as follows : A.R. 275°4', Decl. +65°26' or Long. 330°25', Lat. +87°34'. Referred to Leverrier's orbit of Jupiter the longitude of the node and the obliquity of the Jovian ecliptic came out as follows : N. 290°31', i°39'. The difference between the position angle II and that calculated from these elements is +2°.94.

When a and d resp. a^1 and d^1 represent the geocentric right ascensions, and declinations of Jupiter at two epochs, A and D the coordinates of his north-pole referred to the terrestrial equator, p and p^1 the observed position angles and i the angle between the Jovian axis, and the plane on which it is projected, perpendicular to the line of vision, we have the well-known equations:

$$\sin D = \sin d \cos i + \cos d \sin i \cos p \dots \dots \dots (1)$$

$$\cos i = \sin d \sin D + \cos d \cos D \cos (a - A) \dots \dots \dots (2)$$

$$\sin i = -\cos D \sin (a - A) \operatorname{cosec} p \dots \dots \dots (3)$$

Eliminating i from (1) by aid of (2) and (3) we obtain:

$$\tan D = \tan d \sin (N - a + A) \operatorname{cosec} N \dots \dots \dots (4)$$

where: $\tan N = \sin d \tan p$,

and $\cos N$ is of the same sign as $\cos p$.

Equating the two equations of the form (4) we obtain:

$$M \sin (N - a + A) = \sin (N^1 - a^1 + A) \dots \dots \dots (5)$$

where:

$$\tan d \cot d^1 \sin N^1 \operatorname{cosec} N = M.$$

From (5) we obtain:

$$\tan A = \frac{+M \sin (N - a) - \sin (N^1 - a^1)}{-M \cos (N - a) + \cos (N^1 - a^1)} \dots \dots \dots (6)$$

The value of A is obtained by aid of (6) and D is then obtained from either of the two equations of the form (4).

From the mean of the figures in the sixth and the seventh columns it follows, that the equatorial and polar diameters at the mean distance (5.20273) of Jupiter are $38''.207$ and $35''.942$ respectively and that the equatorial semi-diameter at the mean distance of the Earth from the Sun is $99''.39$. The polar is 0.9407 times the equatorial diameter and the ellipticity $\frac{1}{16.86}$, or about a seventeenth. Its diameter is about 11 times that of the Earth, and as its mass is 309.8 times as large it follows that its density is $\frac{1}{4.3}$ of the mean density of the Earth. It appears therefore that the apparent mean density of Jupiter does not considerably exceed that of water, but of course this includes the no doubt extensive gaseous envelope so that the matter nearer the centre may be much denser.

MICROMETRIC MEASURES OF SATURN.

Epoch.	Pos.	m.	n.	M.P.	Ring—Diam.		Planet.			Obs.—Calc.		
					Ext.	Cass.	Int.	Equ.	Pol.	Pos.	Ext.	Int.
1879, Jan. 3,	+4°.37	±0°.17	4	200	39''.12	...	...	17''.48	16''.00	+0°.04	+0''.54	...
" 4,	4.25	.20	4	600	...	...	...	...	...	-0.07	...	...
" 14,	4.89	.14	4	200	37.26	...	...	17.53	16.81	+0.63	-0.65	...
" 15,	4.14	.24	4	"	37.75	...	...	17.08	16.66	-0.11	-0.12	...
1880, Oct. 21,	0.11	.00	2	"	46.39	39''.35	30''.87	19.31	19.12	-1.39	+1.33	+0''.90
" 23,	1.32	.23	4	"	46.91	...	30.78	19.93	18.88	-0.20	+1.88	+0.83
" 28,	1.20	.20	4	"	46.72	...	30.80	19.53	18.90	-0.35	+1.76	+0.89
" Nov. 3,	1.37	.15	4	"	46.22	39.37	30.78	19.58	18.85	-0.24	+1.38	+0.98
" Dec. 1,	+1.10	.20	4	"	44.59	37.90	30.44	19.11	18.33	-0.70	+1.02	+1.46
1882, Oct. 27,	...	...	...	"	46.66	39.87	...	20.30	...	...	+0.91	...
" Dec. 5,	...	...	...	300	46.92	40.64	...	19.40	...	...	+1.25	...
" 7,	...	...	...	200	47.26	40.41	...	19.65	...	...	+1.66	...
1883, Jan. 8,	-2.50	.25	4	"	45.56	...	...	18.17	...	-1.03	+1.81	...
1885, Dec. 23,	6.42	.28	4	340	...	...	...	...	...	+0.28	...	...
" 27,	7.97	0.50	3	"	...	...	...	...	...	-1.30	...	...
" 28,	8.50	1.27	6	600	...	...	...	...	...	-1.83	...	...
1886, Apr. 5,	-7.31	0.70	7	110	...	...	...	...	...	-0.79	...	...

The first column exhibits the epoch. The second, third, fourth and fifth columns are arranged in the previous table. The sixth to the tenth columns inclusive exhibit the external diameter, the diameter of Cassini's division, the internal diameter of the Ring and the equatorial and polar diameter of the planet. The three last columns exhibit the differences between the observed values and the given in the *Nautical Almanac* for the position of the semi-minor axis and the external and intern diameters of the Ring.

From the measures the following proportions between the different diameters and the exten diameter of the Ring were obtained: Ext. 1.0000, Cass. 0.85434, Int. 0.66573, Equ. 0.42733, and the proportion between the polar and the equatorial diameter of the planet 0.95992 and the elliptic $\frac{1}{24.95}$. The dimensions at the mean distance (9.5388) of Saturn are: External diameter of Ring 40''.28, Cassini's division 34''.42, Internal diameter 26''.82, Equatorial diameter of the planet 17''22 a Polar 16''.53. The equatorial semi-diameter at the mean distance of the earth from the Sun is 82''. Its diameter is about $9\frac{1}{2}$ times that of the Earth and as its mass is 102.7 times as large it follows that its density is $\frac{1}{7.9}$, or about $\frac{1}{8}$ of the mean density of the Earth.

W. DOBERCK,
Government Astronomer

ANNUAL WEATHER REPORT FOR 1886.

At the end of January the NE monsoon increased and blew with the force of a whole gale in the China Sea as far south as $+8^{\circ}$ latitude, at the same time it blew a gale along the southern coast of China and the barometer fell since the 30th of that month. On the night between the 3rd and the 4th of February it blew a whole gale in Hongkong. In March the height of the NE monsoon seems to have been unusually small. The direction of the wind at Victoria Peak was more different from its direction at sea level than is usual during this month, the direction, of course, veering with increasing height, and the lower level of the clouds was nearly every day below 2000 feet. Fog prevailed, the clouds frequently sinking to sea level. At the same time the temperature fell less than half the usual amount with increasing elevation in the air. This may perhaps throw some light on the fact that explorers in certain tropical regions have attributed so very small dimensions to the NE monsoon.

The amount of rain during the summer fell short of the usual quantity during every month except July, when the excess was due to the heavy thunderstorms on the 15th. This is very striking on comparing the monthly rainfall at Stone Cutters' Island with the mean of nine years' rainfall (1878-1886 incl.):—

Month.	Mean.	Rainfall. 1886.	Excess
			above mean.
January,	0.80	2.05	+ 1.25
February,	1.71	1.40	- 0.31
March,	3.65	1.26	- 2.39
April,	6.63	3.77	- 2.86
May,	10.66	2.59	- 8.07
June,	13.66	10.02	- 3.64
July,	16.83	28.62	+ 11.79
August,	17.50	8.12	- 9.38
September,	9.73	3.28	- 6.45
October,	5.45	3.11	- 2.34
November,	1.10	0.00	- 1.10
December,	0.43	1.16	+ 0.73
Year,	88.15	65.38	- 22.77

At the Observatory the cisterns of the barograph and the standard barometer are placed 110 feet above Mean Sea Level. The bulbs of the thermometers are 109 feet above Mean Sea Level and 4 feet above the ground except the terrestrial radiation thermometer, which is about one inch above the ground. The rim of the pluviograph, which is $11\frac{1}{4}$ inches in diameter, is placed 106 feet above Mean Sea Level and 21 inches above the ground. The cups of the anemograph are 150 feet above Mean Sea Level and 45 feet above the ground.

At Victoria Peak the instruments, except the radiation thermometers and the rain-gauge, are placed in the look-out. The cistern of the barometer is 1816 feet above Mean Sea Level. The bulbs of the thermometers are about 4 feet above the floor, except the maximum thermometer, which is a few inches higher. The radiation thermometers are placed at the same height above the ground as at the Observatory. The rim of the rain-gauge is 8 inches in diameter and is one foot above the ground.

At Stone Cutters' Island the rim of the rain-gauge is 8 inches in diameter and is placed 2 feet 4 inches above the ground and about 15 feet above Sea Level.

The Monthly Weather Reports are arranged as follows:—

Table I exhibits the hourly readings of the barometer reduced to $32^{\circ}0$ Fahrenheit, but not to sea level, as measured (at two minutes to the hour named) from the barograms.

Table II exhibits the hourly readings of the temperature of the air round the Observatory as determined by aid of the rotating dry bulb thermometer and the thermograms (at two minutes past the hour named), and also the extreme temperatures during the day.

Table III exhibits the hourly readings of the temperature of evaporation round the observatory as determined by aid of the rotating damp bulb thermometer and the thermograms (at two minutes past the hour named), and also the solar radiation maximum (black bulb) and terrestrial radiation (grass minimum) temperatures, read at 10 p. and entered for the same day.

The thermometers are rotated round a nearly horizontal axis (which is kept about 4 feet above the ground) the observer generally walking along facing the wind, so that the bulbs describe screw of small pitch. The diameter of the screw described by the damp is larger than that described by the dry bulb. These observations are generally made every hour during the day and as often as possible during the night.

Table IV exhibits the mean relative humidity in percentage of saturation (the humidity of air saturated with moisture being 100) and mean tension of aqueous vapour present in the air expressed in inches of mercury, for every hour in the day and for every day in the month, calculated by aid of Blanford's tables from the data exhibited in Tables II and III.

Table V exhibits the duration of sun-shine expressed in hours as registered by aid of the sun-shine recorder from half an hour before to half an hour after the hour (true time) named.

Table VI exhibits the amount of rain expressed in inches registered from half an hour before half an hour after the hour named.

Table VII exhibits, for every hour in the day, the velocity of the wind and its direction in numbers (8=E, 16=S, 24=W, 32=N) as measured from the anemograms. The velocity is the number miles traversed by the wind, from half an hour before to half an hour after the hour named. The direction is read off at the hour, except when the wind is very light and changeable, when the average direction during the hour is estimated, taking into account the velocity from different quarters. The direction is not noted when the velocity is below 1.5 miles an hour.

Table VIII exhibits, for every hour in the day, the mean velocity of the wind reduced to 4 and also to 2 directions, as well as the mean direction of the wind :—

The number of miles traversed by winds from directions 31, 32 and 1 and half the number miles from 30 and 2 are termed (N). The number of miles from 3, 4 and 5 and half the number miles from 2 and 6 are termed (NE), etc. We have then :—

$$N = (N) + (NE) \cos 45^\circ + (NW) \cos 45^\circ.$$

$$E = (E) + (NE) \cos 45^\circ + (SE) \cos 45^\circ.$$

etc

which are the components exhibited in this table.

Table IX exhibits the direction (to two points) and force (0-12) of the wind at Victoria Peak and sea disturbance (0-9) at Cape d'Aguilar.

Table X exhibits the readings of the barometer reduced to 32°.0 Fahrenheit, but not to sea level and of the thermometers at Victoria Peak.

Table XI exhibits the relative humidity and tension of vapour at 10 a., 4 p. and 10 p. daily at the Observatory and at Victoria Peak.

Table XII exhibits the amount (0-10), name and direction whence coming, of the clouds. When the names of upper and lower clouds are given, but only one direction, this refers to the lower cloud.

Table XIII exhibits the amount of rain measured at 10 a. and entered to preceding day different stations and the duration of precipitation at the Observatory.

The following Annual Report is arranged as follows :—

Table I exhibits the mean height of the barometer at the Observatory and at the Peak expressed in inches, the latter being the mean of the 10 a., 4 p. and 10 p. observations, and the excess of the hour values at the Observatory above the mean.

The mean diurnal range in the different months came out as follows : January, 0.111, February, 0.118, March, 0.094, April, 0.087, May, 0.086, June, 0.069, July, 0.067, August, 0.073, September, 0.082, October, 0.091, November, 0.112, December, 0.110. The average range was 0.092 or 0.093 larger than in the two previous years. The mean tension of aqueous vapour was smaller this year than during the previous years, and both these circumstances were no doubt due to the scarcity of rain.

The height of the rock on which the look-out at Victoria Peak is placed has been calculated from the mean of the barometric observations made in 1886 to be 1812 feet, and from the mean of all those made during the past three years to be 1813 feet, adopting for the first year the temperatures observed in Stevenson's screen reduced to the true air-temperature, which were as follows : January 18°.6, February, 56°.7, March, 61°.5, April, 66°.5, May, 73°.4, June, 78°.7, July, 81°.5, August, 81°.5, September, 80°.4, October, 76°.6, November, 67°.2, December, 59°.9. Year, 1884, 70°.4.

Table II exhibits the mean temperature in degrees Fahrenheit at the Observatory and at the Peak, the latter being the mean of the 10 a., 10 p., maximum and minimum temperatures, and the excess of the hourly values at the Observatory above the mean. The hottest part of the day is between 1 p. a.

and the coldest about 6 a., but the lowest temperature occurs a little earlier in summer than in winter. When the wind calms down after sunset the existence of a secondary maximum of temperature may occasionally be traced.

The daily range of temperature is smaller in summer than in winter both owing to the greater bulk of clouds and to the circumstance that the force of the wind is so small during the night in former season. From table XVIII it is seen that the mean range was exactly the same at the Observatory as at the Peak.

The monthly extremes of temperature are exhibited in Table XVI and XVII. The ranges are but twice as great in winter as in summer.

The mean diurnal variability of temperature or the mean of the changes of mean daily temperature from day to day, irrespective of sign, during each month of 1885 was as follows : January, 2°.37, February, 2°.10, March, 2°.32, April, 2°.30, May, 1°.44, June, 1°.14, July, 1°.21, August, 1°.25, September, 0°.93, October, 1°.28, November, 2°.18, December, 2°.23. Year, 1885, 1°.73.

The mean diurnal variability of temperature in 1886 was as follows : January, 1°.85, February, 1.5, March, 2°.86, April, 1°.63, May, 1°.63, June, 1°.59, July, 0°.98, August, 0°.92, September, 81, October, 1°.13, November, 1°.49, December, 1°.64. Year, 1886, 1°.56.

It is seen from these figures that the temperature is twice as changeable in winter as in summer. Such absence of abrupt changes of temperature indicates in a temperate or arctic climate circumstances favourable to the health of the inhabitants but according to Dr. BORIUS, the late distinguished climatologist, great constancy of temperature during the tropical summer may be considered the reverse of favourable.

Table III exhibits the relative humidity in percentage of saturation at the Observatory and at the Peak, the latter being the mean of the 10 a., 4 p. and 10 p. values, and the excess of the hourly values above the mean at the Observatory. The air is farthest from saturation about 1 p. and nearest saturation about midnight. The average relative humidity is registered at 8 a. and 6 p. The diurnal variation is greatest during the last month of the year when the air is comparatively dry.

Table IV exhibits the tension of vapour in inches of mercury at the Observatory and at the Peak, the latter being the mean of observations made at 10 a., 4 p. and 10 p., and the excess of the hourly values above the mean at the Observatory. The daily variation is small along the coast of China especially in summer but during the past year it was much greater than in 1885 and this was no doubt owing to the scarcity of rain. There was least vapour in the air at about 11 a. and most at 10 p.

The monthly ranges in vapour tension (at 10 a., 4 p. and 10 p. only) are exhibited in Tables XVI and XVII. They were twice as great in winter as in summer.

Table V exhibits the total number of hours of bright sunshine. The minimum occurred in February and the maximum in November. The duration of sunshine in percentage of possible duration is obtained as explained in last year's report.

Table VI exhibits the total hourly rainfall and Table VII, the number of hours during which rain was registered. It rains more often at sunrise than at sunset.

The approximate hourly intensity of the rainfall i.e. the hourly rainfall divided with the number of hours, during portion of which it rained, or heavy dew fell, was calculated from the Means and Totals in Tables VI and VII and shows, that the rain is heaviest shortly after noon and lightest about midnight :—

1 a. 0.048	7 a. 0.065	1 p. 0.121	7 p. 0.038
2 „ .072	8 .071	2 „ .121	8 „ .134
3 „ .059	9 .100	3 „ .205	9 „ .169
4 „ .079	10 .105	4 „ .143	10 „ .064
5 „ .073	11 .112	5 „ .142	11 „ .056
6 „ .067	Noon .098	6 „ .057	Midt. .071

The true mean hourly intensity was obtained from the data in Table XI and shows, that the rain is heaviest in July and lightest in February and November :—

January, 0.022, February, 0.012, March, 0.036, April, 0.057, May, 0.042, June, 0.073, July, 74, August, 0.144, September, 0.136, October, 0.108, November, 0.012, December, 0.033. Year, 74.

The rain was much lighter in the past year than in the two previous years, the rainfall being much smaller while its duration was about the same.

Table VIII exhibits the velocity of the wind expressed in miles per hour and the excess of the hourly values above the mean at the Observatory. The velocity at the Peak is computed from the same estimated there at 10 a., 4 p. and 10 p. The wind was strongest at both stations in February and lightest in September. The daily variation was explained in last year's report.

Table IX exhibits the mean direction of the wind at the Observatory and at the Peak. The excess of the hourly direction at the Observatory above the mean, expressed in degrees, is counted from North through East towards South. The results of the discussion of previous years' observations are confirmed. The daily variation was greatest in September. The two mean directions have been

obtained by simply taking the averages of the monthly directions in degrees without regard to force. This is perhaps, everything considered, the best method in this case and the two annual means directions for 1885 in last year's report ought therefore to be altered to E 10° S and E 29° S.

In order to further elucidate the diurnal variation in force and direction of the wind in this region,—a subject of great importance to the shipping,—the mean directions and forces in 1885 at Victoria Peak and South Cape, Formosa, have been calculated. The observations at the latter station are made carefully by the staff of the lighthouse. The observers stand about 150 feet above sea level, but as they are now and then guided in their estimations by the amount of sail carried by such vessels as happen to pass, the figures may be taken to represent the force of the wind at a lower level.

MEAN DIRECTION and FORCE of WIND at VICTORIA PEAK in 1885.

Month. 1885.	7 a.		10 a.		1 p.		4 p.		7 p.		10 p.	
	Direction	Force.	Direction	Force.	Direction	Force.	Direction	Force.	Direction	Force.	Direction	Force.
January,	E	4.2	E 5° N	4.3	E 1° N	4.1	E 1° N	4.1	E 5° N	4.2	E 5° N	4.3
February,	E 10° N	4.6	E 11° N	4.6	E 13° N	4.3	E 18° N	4.2	E 21° N	4.3	E 26° N	4.4
March,	E 13° S	4.3	E 13° S	4.3	E 14° S	4.0	E 16° S	3.9	E 15° S	4.2	E 15° S	4.2
April,	E 27° S	4.4	E 35° S	4.4	E 38° S	4.5	E 38° S	4.3	E 38° S	4.4	E 43° S	4.5
May,	S 33° E	4.3	S 28° E	4.3	S 29° E	4.4	S 21° E	4.3	S 22° E	4.4	S 18° E	4.5
June,	S 8° E	4.6	S 13° E	4.3	S 16° E	4.4	S 15° E	4.5	S 18° E	4.6	S 20° E	4.7
July,	S 30° W	4.4	S 30° W	4.4	S 28° W	4.4	S 18° W	4.3	S 19° W	4.5	S 19° W	4.6
August,	S 18° E	4.3	S 15° E	4.4	S 17° E	4.3	S 11° E	4.5	S 14° E	4.6	S 21° E	4.6
September,	E 11° S	3.9	E 7° S	3.9	E 35° S	4.1	E 32° S	4.0	E 31° S	4.1	E 32° S	4.2
October,	E 12° N	4.6	E 11° N	4.7	E 5° N	4.5	E 1° S	4.4	E 5° N	4.2	E 6° N	4.3
November,	E 20° N	4.2	E 18° N	4.3	E 19° N	4.0	E 23° N	3.9	E 18° N	3.9	E 20° N	3.9
December,	E 7° N	4.5	E 6° N	4.5	E 2° N	4.3	E 6° N	4.2	E 8° N	4.3	E 11° N	4.5
Year,	E 28° S	4.4	E 28° S	4.4	E 31° S	4.3	E 31° S	4.2	E 29° S	4.3	E 28° S	4.4

MEAN DIRECTION of WIND at SOUTH CAPE, FORMOSA, in 1885.

1885.	3 a.	6 a.	9 a.	Noon.	3 p.	6 p.	9 p.	Midt.	Mean.
January,	N 45° E	N 43° E	N 44° E	N 46° E	N 44° E	N 42° E	N 43° E	N 46° E	N 44° E
February,	N 42° E	N 42° E	N 52° E	N 53° E	N 44° E	N 44° E	N 45° E	N 42° E	N 45° E
March,	N 38° E	N 42° E	N 42° E	N 40° E	N 46° E	N 39° E	N 40° E	N 41° E	N 41° E
April,	E 31° N	E 26° N	E 27° N	E 26° N	E 9° N	E 20° N	E 23° N	E 26° N	E 23° N
May,	N 9° W	N 3° W	N 16° W	N 25° W	N 57° W	N 62° W	N 41° W	N 44° W	N 32° W
June,	E 27° N	E 7° N	E 24° S	E 23° S	S	W 18° S	S	E 15° N	E 42° S
July,	W 4° N	W 2° S	W 2° N	W 2° N	W 3° S	W 9° S	W 2° N	W 7° N	W
August,	W 9° N	W 32° N	W 25° N	W 12° N	W 3° S	W 4° N	W 8° S	W 10° N	W 10° N
September,	N 19° W	N 8° W	N 6° W	N 27° W	N 50° W	N 43° W	N 29° W	N 29° W	N 26° W
October,	N 42° E	N 43° E	N 45° E	N 43° E	N 43° E	N 42° E	N 42° E	N 43° E	N 43° E
November,	N 45° E	N 43° E	N 44° E	N 45° E	N 45° E	N 45° E	N 45° E	N 45° E	N 45° E
December,	N 43° E	N 43° E	N 43° E	N 44° E	N 42° E	N 42° E	N 42° E	N 43° E	N 43° E
Year,	N 24° E	N 26° E	N 29° E	N 27° E	N 22° E	N 20° E	N 20° E	N 22° E	N 26° E

MEAN FORCE of WIND at SOUTH CAPE, FORMOSA, in 1885.

1885.	3 a.	6 a.	9 a.	Noon.	3 p.	6 p.	9 p.	Midt.	Mean
January,	8.1	3.2	3.0	2.9	2.6	2.6	2.7	3.0	2.9
February,	4.0	4.0	4.0	3.7	3.4	3.3	3.4	3.7	3.7
March,	3.1	3.2	3.0	2.8	2.8	2.7	2.8	3.1	2.9
April,	2.8	2.5	2.6	2.5	2.2	2.5	2.1	2.5	2.6
May,	2.6	2.6	2.7	2.8	2.5	2.1	2.0	2.2	2.1
June,	2.3	2.4	2.2	2.2	2.5	3.0	2.7	2.8	2.8
July,	2.8	2.9	2.8	2.8	2.9	2.2	1.9	2.0	2.2
August,	2.2	2.3	2.5	2.5	2.4	2.2	2.3	2.3	2.3
September,	2.4	2.4	2.4	2.3	2.3	2.3	2.3	2.3	2.3
October,	3.5	3.6	4.1	3.9	3.7	3.6	3.7	3.7	3.7
November,	4.0	3.9	4.4	4.4	4.1	3.8	3.8	4.1	4.1
December,	3.7	3.6	3.7	3.7	3.6	3.5	3.5	3.7	3.7
Year,	3.0	3.1	3.1	3.0	2.9	2.8	2.8	3.0	3.0

At the height of Victoria Peak the direction of the wind is nearly constant throughout the day. Only a slight tendency to veer during the daytime can perhaps be traced. Above this altitude as remarked in last year's report there is possibly a slight tendency to variation in the opposite direction. The force of the wind is likewise very constant. It seems to be rather stronger at night than in the day time but this cannot be decided as yet with certainty.

In Southern Formosa the wind comes from NE without change in winter. This is the mean direction either diurnal or annual from October till March incl. On the contrary the direction appears to be very changeable in summer. With regard to the diurnal variation in the force the result published last year is confirmed. The maximum wind-force appears to be registered about sunrise and the minimum about sunset, but the variation is very small. The diurnal variation in the direction is scarcely perceptible but from the mean of the twelve months it would even appear as if the wind were backing a little during the day time, but the veering of the wind during the day time is very prominent in summer.

Table X exhibits the total distance traversed by, as well as the duration and average velocity of winds from bi-quadrantal points. The velocity is a maximum for E winds but there is slight secondary maximum for SW winds. The SW monsoon was not so strong as in 1885, which perhaps accounts for the scarcity of rain.

Table XI exhibits the rainfall measured at 10 a. and entered to preceding day. Each day on which not less than 0.01 inches was measured, is counted. The rainfall increases quickly with the height at least up to 2000 feet notwithstanding the far greater force of the wind up there. We have no means of observing what takes place at a still higher level but Indian Meteorologists have ascertained that the rain reaches a maximum somewhere about 4000 feet above the level of the sea in India.

Table XII exhibits particulars concerning different phenomena. Fog occurred frequently in March. Electric phenomena prevailed in August but the thunderstorms were not so violent as in 1885. Unusual visibility of distant objects was most noticeable in August. Dew was frequent during the early summer. Rainbows were seen oftener than usual owing to the lightness of the rains. Solar halos and coronas were most frequent in August.

Table XIII shows the frequency of clouds of different forms from observations made 8 times a day.

The number of days on which clouds were observed to be below 2000 feet was as follows:— January, 12, February, 16, March, 28, April, 25, May, 18, June, 16, July, 22, August, 15, September, 3, October, 5, November, 0, December, 3. The number of days on which they were observed to be below 1000 feet was as follows:—January, 3, February, 10, March, 21, April, 17, May, 7, June, 3, July, 5, August, 0, September, 0, October, 0, November, 0, December, 2.

The mean direction of the clouds (whence coming) was as follows:—

1886.	Lower.	Upper.	Cirrus.
January,	ESE	WSW	—
February,.....	E by S	W	—
March,	SE	W by S	—
April,	ESE by S	W by S	W
May,.....	SE by S	W by N	NW by W
June,	S	NNE	—
July,	S by E	NE by E	ENE
August,	SW by S	NE	NNE
September,	ENE	NW by W	W by S
October,	E	WSW	NW
November,	ENE	WSW	WSW
December,	ENE	W by S	—

Table XIV exhibits the amount of cloud, which is greatest in the morning and least in the evening as well as greatest in February and least in December.

Table XV exhibits the amount (0-9) of sea-disturbance, which is only about half as great in summer as in winter.

Table XVI and XVII exhibit the extremes of some of the meteorological elements.

Table XVIII exhibits the mean of the readings of the black bulb maximum thermometers in vacuo and the excess above the mean maximum air-temperatures, the average of the number of degrees by which the minimum air-temperature exceeded that indicated by a minimum thermometer freely exposed with its bulb one inch above the grass, the average weight of the aqueous vapour in the air and the diurnal range of temperature.

During the past year the indications of a bright bulb solar radiation maximum thermometer in vacuo have been registered daily at 10 p. The readings are exhibited below. This thermometer was compared at Kew with the readings of the black bulb in vacuo and with the maximum air-temperature. The results of the comparisons, about 360 in number, were kindly communicated to me by Mr. WHIPPLE, the Director of the Kew Observatory. Compared to the black bulb in vacuo the bright bulb reads possibly a little higher in Hongkong but the results in both places are really alike within the probable error of such observations. At Kew it was compared with the maximum temperature in the thermograph-screen and at Hongkong with the same but corrected by aid of eye-observations of thermometers rotated hourly. At Hongkong the bright-bulb thermometer readings exceed the air-temperature by a larger amount than at Kew owing to the smaller daily range of temperature. In England maximum air-temperature corresponding to a certain mean daily temperature is much greater than within the tropics.

BRIGHT BULB SOLAR RADIATION MAXIMUM THERMOMETER COMPARISONS.

Black Bulb.	Mean Difference.		Air Max.	Mean Difference.	
	Kew.	Hongkong.		Kew.	Hongkong.
80°	-18°	—	60°	+19°	+18°
90°	-24°	—	70°	+19°	+21°
100°	-28°	-26°	80°	+18°	+22°
110°	-30°	-31°	—	—	—
120°	-35°	-32°	—	—	—
130°	-36°	-34°	—	—	—
140°	—	-35°	—	—	—

SOLAR RADIATION BRIGHT BULB MAXIMUM TEMPERATURE IN 1886.

Date. 1886.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1,	88.7	78.7	88.9	98.4	95.3	92.9	109.3	113.6	110.4	101.2	93.8	86.
2,	86.7	62.3	88.3	100.6	97.6	90.3	111.0	109.3	108.1	106.1	94.3	86.
3,	88.3	60.1	92.3	91.8	92.8	110.6	108.7	110.6	109.1	107.7	95.9	86.
4,	86.4	58.1	82.8	99.4	105.8	97.3	110.6	112.2	110.4	94.0	97.4	89.
5,	84.9	61.7	64.7	102.7	104.8	107.6	106.9	114.3	110.6	106.0	99.1	93.
6,	77.4	90.4	83.9	99.0	101.7	108.1	109.8	117.6	107.9	103.7	102.2	92.
7,	91.1	76.7	84.3	98.9	100.9	105.7	109.0	110.7	104.9	101.6	99.1	91.
8,	90.2	78.9	89.3	98.3	97.7	105.2	87.3	114.3	109.1	103.3	95.0	86.
9,	102.3	70.7	90.7	94.1	96.8	110.1	97.8	110.5	93.6	103.4	97.4	86.
10,	90.6	57.7	77.8	101.3	77.8	111.2	112.6	110.8	106.0	107.7	100.0	89.
11,	92.4	62.0	87.3	98.7	94.4	102.1	108.2	110.7	105.6	108.8	96.7	87.
12,	79.6	71.5	89.4	86.8	103.9	99.8	106.8	110.1	110.7	106.2	94.9	83.
13,	84.6	72.6	98.7	78.8	104.3	83.7	110.3	107.3	111.8	102.2	96.1	72.
14,	91.2	80.8	82.8	79.3	110.0	92.7	104.6	109.8	110.2	103.9	93.4	91.
15,	80.7	70.1	90.6	87.8	103.7	107.6	81.2	105.8	107.6	100.3	98.3	86.
16,	76.3	70.3	89.7	73.4	107.5	109.2	90.3	99.8	111.9	103.7	96.1	84.
17,	80.7	59.5	93.6	73.8	108.7	109.8	86.6	106.7	113.0	102.0	98.9	83.
18,	79.7	57.2	91.4	91.2	108.2	105.8	82.6	110.6	112.6	102.3	96.3	90.
19,	85.6	70.9	94.3	92.3	108.3	94.3	102.8	109.3	112.9	104.7	91.6	88.
20,	80.2	78.8	91.5	83.7	110.5	106.6	106.1	113.2	106.6	107.8	96.0	89.
21,	68.8	71.8	95.8	92.7	109.1	109.3	105.2	110.1	109.8	107.8	100.4	68.
22,	76.3	81.4	93.9	79.8	87.7	106.3	106.6	110.8	113.3	99.6	96.3	58.
23,	92.2	83.2	93.6	90.3	108.0	110.1	110.3	108.7	112.4	101.4	91.3	70.
24,	66.7	73.4	65.2	91.6	109.6	110.7	107.9	111.3	103.3	99.8	89.8	8.
25,	65.8	76.1	64.7	97.2	106.1	107.3	110.8	105.6	102.7	105.2	99.4	8.
26,	63.1	88.7	76.0	91.6	103.5	111.1	109.1	79.4	103.8	104.3	96.5	8.
27,	69.8	80.6	69.3	94.6	96.4	110.5	108.6	103.3	102.2	99.3	90.6	8.
28,	67.2	77.7	83.8	72.7	102.4	112.9	112.7	106.0	101.8	101.3	94.2	8.
29,	55.6	...	82.0	94.2	107.7	107.3	109.3	107.7	102.7	107.2	101.8	8.
30,	78.3	...	90.2	102.3	111.2	108.3	108.6	110.4	102.0	98.3	89.7	6.
31,	77.8	...	88.6	...	97.7	...	109.9	107.9	...	97.8	...	8.
Mean,.....	80.6	72.2	85.7	91.2	102.3	104.8	104.6	108.7	107.6	103.2	96.1	8.
Below Black Bulb,	31.4	26.1	31.5	30.6	35.5	33.8	33.5	36.7	36.3	35.3	36.4	3.
Above Air Max.,..	18.5	15.8	20.0	18.9	22.7	21.5	20.4	23.2	23.8	23.0	23.1	2.

Table XVIII exhibits also the height to which one must ascend in order to have the monthly mean temperature lowered one degree. The figures have been obtained from the data in Table II. Of course the fall of temperature within some ten or twenty feet of the ground is much greater especially on a hot day, but the effect of this is eliminated by observing the temperature at the same height above ground at both the upper and the lower station. The results obtained for each month during the past three years are exhibited below. The results for 1884 have been re-computed by means of the true air-temperatures given above. It is seen that the height varies from about 200 to about 700 feet, but of course the results in individual instances vary to a somewhat greater extent, and this must often make the true astronomical refraction different from that obtained from the tables. Moreover the temperatures adopted in the construction of the tables may have been very different from the true air-temperatures and when subsequently these tables are used in other places to clear the observations from the effects of refraction, it is very doubtful whether the thermometers are exposed exactly the same way as where the tables were constructed and even so the process is not strictly accurate if the true air-temperature is not exactly determined. It would therefore be of importance to have the rotating thermometer introduced in astronomical observatories. This instrument is particularly well adapted for occasionally determining the temperature during the night. No account is taken of the effect of the barometric gradient in the neighbourhood, which tends to make the value of the refraction different in different azimuths. The rates at which the temperature falls with increasing height in a cyclone and in an anticyclone are different. For these reasons the refraction is one of the most uncertain elements in practical astronomy.

	1884.	1885.	1886.	Mean.
January,	280	224	299	268
February,.....	289	251	294	278
March,	533	397	656	529
April,	437	416	406	420
May,	341	275	294	303
June,	271	275	258	268
July,.....	251	294	267	271
August,	255	328	280	288
September,	262	310	280	284
October,	258	294	280	277
November,	271	284	234	263
December,	258	322	222	267
Mean,	309	306	314	310

The speed with which the temperature falls on ascending in the atmosphere is seen to be a function of the humidity. The change is much smaller in damp than in dry weather.

TABLE I.

Mean Height of the Barometer at the Observatory and at the Peak for each month in the Year 1886, and Mean Diurnal Variation at the Observatory.

Month.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Mean.	
	Observatory.	Peak.																								
January,	+ .011	+ .002	- .005	- .011	- .011	.000	+ .016	+ .036	+ .053	+ .057	+ .047	+ .020	- .016	- .038	- .054	- .054	- .045	- .034	- .020	- .002	+ .010	+ .016	+ .019	+ .016	30.040	28.245
February,	+ .012	+ .002	- .005	- .011	- .009	+ .003	+ .022	+ .039	+ .053	+ .058	+ .047	+ .024	- .011	- .037	- .054	- .060	- .053	- .041	- .028	- .006	+ .007	+ .014	+ .017	+ .014	30.068	28.255
March,	+ .008	- .016	- .021	- .028	- .023	- .008	+ .011	+ .035	+ .046	+ .051	+ .043	+ .024	- .002	- .023	- .039	- .043	- .041	- .029	- .020	- .002	+ .015	+ .024	+ .022	+ .016	29.954	28.192
April,	+ .003	- .011	- .023	- .023	- .014	- .005	+ .012	+ .029	+ .040	+ .044	+ .037	+ .023	+ .001	- .019	- .032	- .043	- .041	- .031	- .018	- .001	+ .014	+ .022	+ .023	+ .016	29.843	28.111
May,	- .001	- .013	- .018	- .016	- .009	+ .006	+ .021	+ .033	+ .043	+ .044	+ .037	+ .026	+ .007	- .012	- .029	- .042	- .042	- .035	- .026	- .009	+ .004	+ .015	+ .014	+ .005	29.801	28.093
June,	+ .003	- .008	- .013	- .015	- .011	+ .002	+ .015	+ .023	+ .030	+ .030	+ .026	+ .016	+ .003	- .013	- .026	- .038	- .039	- .032	- .018	- .002	+ .010	+ .025	+ .027	+ .017	29.677	27.989
July,	+ .003	- .008	- .013	- .015	- .015	- .004	+ .005	+ .016	+ .025	+ .029	+ .027	+ .015	+ .001	- .013	- .026	- .036	- .038	- .030	- .015	+ .003	+ .017	+ .030	+ .027	+ .016	29.670	27.986
August,	+ .002	- .010	- .018	- .019	- .013	- .004	+ .009	+ .021	+ .030	+ .033	+ .028	+ .017	+ .001	- .016	- .028	- .039	- .040	- .034	- .021	.000	+ .017	+ .027	+ .027	+ .019	29.642	27.956
September,	+ .001	- .008	- .015	- .017	- .011	- .001	+ .015	+ .030	+ .037	+ .038	+ .031	+ .014	- .007	- .025	- .039	- .044	- .041	- .029	- .016	+ .003	+ .021	+ .025	+ .022	+ .015	29.738	28.039
October,	- .001	- .012	- .020	- .021	- .014	.000	+ .017	+ .034	+ .045	+ .045	+ .033	+ .012	- .012	- .033	- .044	- .046	- .040	- .030	- .014	+ .008	+ .020	+ .024	+ .023	+ .016	29.874	28.152
November,	+ .004	- .006	- .009	- .010	- .003	+ .012	+ .031	+ .045	+ .057	+ .053	+ .032	+ .006	- .024	- .045	- .055	- .054	- .045	- .033	- .014	+ .003	+ .015	+ .019	+ .018	+ .011	30.026	28.270
December,	+ .014	+ .004	- .003	- .006	- .005	+ .007	+ .023	+ .039	+ .051	+ .050	+ .038	+ .010	- .026	- .048	- .059	- .058	- .047	- .032	- .015	+ .001	+ .011	+ .019	+ .019	+ .014	30.086	28.290
Means,	+ .005	- .006	- .014	- .016	- .011	+ .001	+ .016	+ .032	+ .042	+ .044	+ .036	+ .017	- .007	- .027	- .040	- .046	- .043	- .032	- .019	.000	+ .013	+ .022	+ .021	+ .015	29.868	28.131

TABLE II.

Mean Temperature at the Observatory and at the Peak for each Month in the Year 1886, and Mean Diurnal Variation at the Observatory.

Month.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Mean.	
	Observatory.	Peak.																								
January,	- .9	- 1.2	- 1.6	- 1.9	- 1.9	- 2.1	- 2.2	- 1.6	- .6	+ .6	+ 1.4	+ 1.9	+ 2.3	+ 2.6	+ 2.4	+ 2.0	+ 1.3	+ 0.4	0.0	0.0	- .1	- .3	- .6	- 1.0	58.7	53.0
February,	- .8	- 0.9	- 1.2	- 1.3	- 1.5	- 1.5	- 1.6	- 1.1	- .4	+ .5	+ 0.9	+ 1.5	+ 1.7	+ 1.8	+ 1.6	+ 1.4	+ 1.0	+ 0.4	+ 0.2	+ 0.2	+ 0.2	0.0	- .1	- .2	53.6	47.8
March,	- .9	- 1.3	- 1.4	- 1.5	- 1.8	- 1.7	- 1.7	- 1.1	- .2	+ .8	+ 1.2	+ 2.0	+ 2.4	+ 2.1	+ 1.9	+ 1.6	+ 0.9	- .1	- .5	- .5	- .3	- .3	- .4	- .4	62.0	59.4
April,	- .7	- 0.9	- 1.0	- 1.2	- 1.2	- 1.4	- 1.1	- .4	+ .3	+ 0.9	+ 1.5	+ 1.4	+ 1.5	+ 1.5	+ 1.4	+ 1.0	+ 0.5	+ 0.1	- .1	- .2	- .2	- .3	- .5	- .6	69.4	65.2
May,	- 1.4	- 1.5	- 1.7	- 2.0	- 2.1	- 2.0	- 1.2	- .3	+ .7	+ 1.2	+ 1.7	+ 2.6	+ 2.7	+ 2.5	+ 2.4	+ 1.8	+ 1.1	+ 0.4	- .3	- .5	- .6	- .6	- .8	- .9	75.7	69.9
June,	- 1.2	- 1.4	- 1.5	- 1.6	- 1.6	- 1.5	- 0.7	+ .2	+ 0.7	+ 1.3	+ 1.4	+ 1.5	+ 2.0	+ 1.9	+ 1.8	+ 1.2	+ 0.9	+ 0.4	- .3	- .7	- .7	- .8	- .9	- 1.0	79.8	73.2
July,	- 1.3	- 1.4	- 1.4	- 1.7	- 1.7	- 1.8	- 1.0	- .1	+ 0.6	+ 1.1	+ 1.6	+ 2.0	+ 2.3	+ 2.3	+ 2.1	+ 1.6	+ 1.1	+ 0.5	- .2	- .6	- .9	- .9	- 1.1	- 1.2	80.6	74.2
August,	- 1.4	- 1.6	- 1.6	- 1.9	- 1.9	- 1.9	- 1.2	- .2	+ 1.0	+ 1.9	+ 2.3	+ 2.3	+ 2.4	+ 2.7	+ 2.7	+ 2.4	+ 1.3	+ 0.3	- .5	- .8	- 1.1	- 1.2	- 1.4	- 1.6	81.2	75.1
September,	- 2.2	- 2.4	- 2.6	- 2.6	- 2.7	- 2.7	- 1.8	- .7	+ 0.9	+ 2.2	+ 2.6	+ 3.4	+ 3.6	+ 3.7	+ 3.5	+ 2.7	+ 1.6	+ 0.5	- .2	- .6	- 1.2	- 1.4	- 1.8	- 2.0	79.7	73.6
October,	- 1.4	- 1.5	- 1.8	- 2.0	- 2.1	- 2.1	- 1.5	- .3	+ 0.4	+ 1.5	+ 1.9	+ 2.5	+ 2.7	+ 2.7	+ 2.5	+ 2.0	+ 1.2	+ 0.1	- .3	- .6	- .8	- 1.0	- 1.2	- 1.5	76.8	70.7
November,	- 1.3	- 1.7	- 2.1	- 2.5	- 2.8	- 2.7	- 1.3	+ 0.1	+ 1.3	+ 2.4	+ 3.0	+ 3.2	+ 3.2	+ 2.9	+ 2.3	+ 1.3	+ 0.6	+ 0.3	- .1	- .4	- .5	- 0.7	- 1.1	- 1.1	69.0	61.7
December,	- 1.4	- 1.8	- 2.0	- 2.2	- 2.5	- 2.8	- 1.6	- .1	+ 1.4	+ 2.3	+ 3.0	+ 3.5	+ 3.6	+ 3.1	+ 2.3	+ 1.3	+ 0.5	+ 0.1	- .2	- .3	- .6	- 1.0	- 1.1	- 1.1	59.8	52.1
Means,.....	- 1.2	- 1.5	- 1.7	- 1.9	- 2.0	- 2.0	- 1.6	- .7	+ 0.3	+ 1.2	+ 1.8	+ 2.3	+ 2.5	+ 2.5	+ 2.4	+ 1.9	+ 1.1	+ 0.3	- .1	- .4	- .5	- 0.7	- 0.9	- 1.1	70.5	64.7

Mean Humidity at the Observatory and at the Peak for each Month in the Year 1886, and Mean Diurnal Variation at the Observatory.

Month.																					Mean.					
	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Observatory.	Peak.
January,	+5	+4	+3	+3	+3	+3	+4	+3	-1	-5	-6	-7	-7	-8	-7	-5	-2	0	+3	+2	+3	+4	+4	+5	67	84
February,	+4	+1	+1	+2	+1	+1	+2	0	-1	-2	-3	-5	-6	-6	-6	-4	-2	0	+1	+1	+2	+4	+4	+4	75	89
March,	+2	+2	+2	+2	+2	+2	+2	0	0	-3	-5	-4	-7	-6	-4	-4	-2	+1	+1	+2	+2	+3	+3	+3	87	91
April,	+3	+3	+3	+3	+3	+3	+2	0	-2	-3	-5	-4	-4	-4	-4	-2	-2	0	0	+1	+2	+3	+3	+3	87	94
May,	+4	+4	+4	+4	+5	+5	+3	-1	-3	-5	-7	-8	-8	-8	-7	-6	-4	-1	+2	+3	+3	+4	+4	+4	81	92
June,	+3	+3	+3	+3	+3	+3	+3	-1	-2	-4	-5	-5	-6	-6	-5	-4	-2	+2	+3	+3	+3	+3	+4	+4	83	93
July,	+4	+4	+4	+4	+5	+5	+4	+1	0	-2	-3	-5	-5	-5	-5	-4	-3	-2	-1	+2	+2	+3	+3	+4	83	94
August,	+5	+5	+5	+5	+5	+6	+5	+2	-2	-6	-7	-5	-6	-7	-8	-6	-4	-1	+1	+3	+4	+4	+4	+5	82	93
September,	+7	+7	+7	+6	+5	+4	+2	-2	-7	-9	-10	-11	-10	-9	-9	-7	-3	0	+2	+5	+7	+6	+7	+7	67	79
October,	+5	+4	+5	+5	+5	+4	+2	-2	-4	-7	-7	-8	-8	-8	-7	-5	-3	0	+2	+2	+3	+3	+4	+4	72	84
November,	+7	+6	+5	+4	+4	+3	+2	-2	-5	-7	-9	-10	-10	-10	-8	-4	-3	-1	+3	+5	+6	+7	+6	+7	59	72
December,	+6	+7	+7	+5	+2	0	-1	-5	-8	-10	-11	-12	-10	-10	-7	-4	0	+2	+4	+5	+6	+7	+10	+10	55	67
Means,.....	+5	+4	+4	+4	+4	+3	+2	-1	-3	-5	-6	-7	-7	-7	-6	-5	-3	0	+2	+3	+4	+4	+5	+5	75	86

TABLE IV.

Mean Tension of Aqueous Vapour at the Observatory and at the Peak for each Month in the Year 1886, and Mean Diurnal Variation at the Observatory.

Month.																					Mean.						
	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Observatory.	Peak.	
January, .....	.014	+.006	-.002	-.006	-.006	-.009	-.008	-.002	-.012	-.015	-.014	-.012	-.009	-.007	-.007	-.002	+.004	+.005	+.014	+.011	+.018	+.017	+.016	+.012	0.338	0.351
February,	+.004	-.003	-.007	-.006	-.010	-.010	-.009	-.008	-.006	-.005	-.003	-.005	-.005	-.006	+.002	+.002	+.002	+.004	+.010	+.010	+.012	+.015	+.016	+.017	.317	.311	
March,	-.001	-.008	-.011	-.012	-.017	-.016	-.016	-.011	-.004	-.002	-.001	+.009	+.005	+.004	+.006	+.007	+.007	+.001	.000	+.003	+.010	+.013	+.014	+.014	.493	.489	
April,	+.008	+.004	-.002	-.007	-.007	-.015	-.012	-.007	-.005	-.002	-.007	-.006	.000	+.004	+.002	+.003	-.001	+.001	+.003	+.005	+.009	+.010	+.009	+.003	.627	.597	
May,	+.002	-.005	-.006	-.009	-.004	-.002	-.001	-.006	-.003	-.014	-.015	-.008	-.005	-.011	-.006	-.002	.000	+.001	+.010	+.013	+.015	+.019	+.017	+.015	.733	.683	
June, .....	.000	-.001	.000	-.007	-.003	.000	+.010	+.007	+.009	+.001	-.005	-.006	+.001	-.002	-.005	-.011	-.007	-.004	+.006	+.010	+.006	+.003	.000	+.006	.844	.770
July,	-.001	-.004	-.004	-.009	-.004	-.003	+.009	+.005	+.009	+.006	+.009	-.001	+.008	+.008	+.002	.000	-.007	-.008	-.007	-.005	-.005	-.001	-.003	-.002	.867	.802	
August,	+.004	+.003	-.002	-.003	-.003	+.002	+.011	+.010	+.003	-.010	-.011	+.007	+.007	+.002	-.003	-.013	+.002	-.010	-.001	-.012	+.001	+.009	+.006	-.004	+.003	.874	.813
September,	+.020	+.015	+.014	+.006	-.009	-.013	-.013	-.027	-.041	-.043	-.032	-.035	-.026	-.019	-.013	-.006	+.006	+.016	+.026	+.039	+.043	+.038	+.035	+.029	.687	.667	
October,	+.023	+.013	+.009	+.007	.000	-.010	-.011	-.016	-.021	-.025	-.026	-.018	-.009	-.009	-.002	.000	+.007	+.009	+.015	+.015	+.018	+.013	+.016	+.013	.673	.643	
November,	+.029	+.018	+.011	-.003	-.011	-.018	-.023	-.028	-.031	-.035	-.036	-.032	-.031	-.025	-.017	.000	+.001	+.007	+.027	+.036	+.043	+.044	+.037	+.032	.425	.413	
December,	+.022	+.020	+.017	+.003	-.014	-.024	-.028	-.033	-.035	-.036	-.037	-.036	-.023	-.017	-.007	+.004	+.015	+.017	+.022	+.027	+.028	+.034	+.039	+.038	.286	.284	
Means,.....	+.010	+.005	+.001	-.004	-.007	-.010	-.008	-.010	-.011	-.015	-.016	-.012	-.008	-.007	-.005	.000	+.001	+.004	+.009	+.014	+.017	+.018	+.016	+.015	0.597	0.569	

TABLE V.

Total Hourly Duration of Sunshine for each Month in the Year 1886, and Total Monthly Duration of Sunshine.

Month.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	Total Record.	Total Possible.	Percentage of Possible.
January, .....	...	3.2	10.6	13.3	13.7	14.5	15.2	16.0	14.7	13.9	12.7	4.3	...	132.1	311	42
February, .....	...	1.2	3.3	2.2	3.1	3.5	3.4	4.3	3.3	3.4	1.8	0.7	...	30.2	294	10
March, .....	...	...	2.9	4.6	7.8	10.1	6.8	8.1	6.1	6.2	6.7	3.1	...	62.4	344	18
April, .....	...	2.9	6.2	9.5	8.9	10.0	13.0	11.8	12.0	11.2	9.9	4.4	0.8	100.6	353	28
May,	1.1	9.5	12.4	13.0	14.2	17.0	18.8	18.5	19.5	18.2	16.8	14.9	5.4	179.3	380	47
June,	1.7	11.0	12.4	15.1	16.9	15.0	13.0	14.1	14.6	14.0	12.1	11.3	4.7	155.9	376	41
July,	1.7	11.3	13.9	15.9	17.5	18.5	18.6	17.6	19.6	17.7	13.6	12.0	3.4	181.3	384	47
August,	2.5	13.7	18.0	22.0	19.3	18.3	15.3	18.7	21.0	18.1	17.7	13.8	3.5	201.9	370	55
September,	0.4	15.4	20.6	24.1	25.8	25.5	25.6	23.4	22.5	24.2	21.3	16.0	0.9	245.7	340	72
October, .....	...	8.4	16.4	18.4	21.4	22.7	24.3	25.0	24.0	24.7	22.7	17.4	...	225.4	331	68
November, .....	...	9.1	24.7	26.7	27.5	28.3	27.8	27.9	27.9	27.8	25.8	14.5	...	268.0	306	88
December, .....	...	7.2	23.1	24.3	24.1	24.1	24.2	23.8	23.1	22.0	22.2	9.7	...	227.8	307	74
Sums,	7.4	92.9	164.5	189.1	200.2	207.5	206.0	209.2	208.3	201.4	183.3	122.1	18.7	2010.6	4096	49

TABLE VI.
Total Hourly Rainfall for each Month in the Year 1886.

Month.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Sum.
January,	0.170	0.260	0.080	0.070	0.035	0.070	0.095	0.075	0.010	0.210	0.185	0.075	...	0.050	0.155	0.025	0.155	0.005	...	0.015	...	0.025	0.175	0.075	2.015
February,	0.045	0.015	0.015	0.095	0.220	0.025	...	0.015	...	0.015	...	0.035	0.070	0.100	0.040	0.045	0.040	0.070	0.040	0.260	0.235	0.070	0.085	1.535	
March,	0.035	0.150	0.075	...	0.120	0.170	0.090	0.015	...	0.035	0.110	0.005	...	0.680	0.025	0.145	0.125	0.040	0.025	0.030	0.240	0.360	0.115	2.590	
April,	0.025	0.010	0.405	0.565	0.065	0.030	0.025	...	0.065	0.085	0.870	1.040	0.970	0.555	0.110	0.180	0.105	0.210	0.100	0.070	...	0.010	0.165	0.015	5.675
May,	0.080	0.080	0.105	0.135	0.115	0.090	0.085	0.150	0.095	0.055	0.115	0.095	0.035	0.040	0.385	0.050	0.015	0.010	0.005	0.010	0.020	0.005	...	...	1.775
June,	0.270	0.480	0.165	0.520	0.850	0.745	0.400	0.870	1.040	0.560	0.420	0.800	0.705	0.295	0.675	0.545	0.195	0.230	0.115	0.390	0.195	0.125	0.055	0.040	10.625
July,	0.940	0.360	0.915	0.980	1.195	1.075	1.030	0.720	1.275	1.680	0.365	0.485	0.630	1.255	3.855	2.985	2.800	0.610	0.370	0.755	1.430	1.175	0.515	0.835	28.235
August,	0.025	0.360	0.050	0.275	0.430	0.600	0.400	0.635	0.530	1.285	0.950	0.605	0.945	0.225	0.060	...	...	0.020	0.015	0.125	0.335	0.155	0.240	0.815	9.080
September, .....	...	0.095	0.030	0.230	0.145	0.105	...	0.010	0.020	...	0.130	...	0.010	0.040	0.215	...	...	0.020	...	0.595	1.270	0.025	0.055	...	2.995
October,	0.010	...	0.095	0.115	0.035	0.060	0.090	0.010	0.215	0.075	...	0.005	...	...	...	0.055	0.005	0.010	1.095	1.015	0.005	0.005	0.005	2.815	
November,	0.005	...	...	0.005	0.005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.025	0.005	0.005	0.050	0.050
December,	0.045	0.070	0.005	0.015	0.060	0.130	0.075	0.040	0.035	0.005	...	0.035	0.055	0.140	0.125	0.015	0.175	0.035	0.145	0.105	0.095	0.090	0.210	0.070	1.775
Mean,.....	0.137	0.157	0.154	0.250	0.273	0.258	0.191	0.212	0.274	0.334	0.262	0.262	0.282	0.222	0.530	0.322	0.307	0.109	0.072	0.269	0.283	0.176	0.155	0.172	5.764

TABLE VII.

Number of Hours, during portion of which it rained, for each Month in the Year 1886.

Month.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Total.
January,	1	2	2	3	1	2	4	4	2	2	2	2	...	1	2	2	1	1	...	1	...	1	3	2	41
February,	4	1	3	1	4	1	...	2	...	3	...	1	2	2	2	2	2	2	2	4	5	3	5	51	
March,	4	3	2	...	2	3	2	1	...	5	2	1	...	2	3	2	2	3	2	3	4	5	3	54	
April,	3	1	2	2	1	2	3	...	4	7	4	7	6	4	6	5	3	2	2	2	1	3	3	73	
May,	3	1	1	4	3	4	3	3	2	1	1	1	2	1	2	2	2	2	1	1	1	...	...	42
June,	6	7	6	8	10	6	8	8	7	6	5	7	6	3	6	4	6	7	4	5	4	3	2	138	
July,	6	6	11	8	14	16	7	11	11	9	8	6	8	5	5	7	6	3	6	5	6	7	7	187	
August,	3	2	1	4	4	6	4	3	3	3	5	5	3	3	2	...	1	2	2	3	3	3	4	69	
September,	2	2	3	1	2	...	1	1	...	1	...	1	1	1	...	1	...	1	1	4	1	2	...	25	
October,	1	...	1	1	2	2	1	2	1	...	1	...	...	...	...	2	1	1	2	1	1	1	1	24
November,	1	...	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	1	6
December,	2	1	1	3	2	2	2	1	1	...	2	1	2	3	2	2	1	2	1	1	2	2	1	39	
Total,.....	34	26	32	38	45	46	35	36	33	38	28	32	28	22	31	27	26	23	23	24	27	33	33	29	749

TABLE VIII.

Mean Hourly Velocity of the Wind at the Observatory and at the Peak for each Month in the Year 1886, and Mean Diurnal Variation at the Observatory.

Month.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Mean.	Observatory.	Peak.
	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.			
January,	-0.2	-0.3	0.0	0.0	-0.5	-1.4	-1.1	-0.8	+0.1	+0.8	+1.5	+1.5	+1.4	+1.0	+1.0	+0.7	-0.4	-1.5	-1.8	-1.2	-0.4	+0.7	+0.8	0.0	13.7	26	
February,	+0.6	+0.4	-0.8	-0.9	-0.5	-0.5	-1.5	-1.4	-0.1	+0.8	+1.6	+0.4	+1.4	+1.6	+1.6	+0.9	+0.2	-0.8	-2.2	-1.2	0.0	+0.8	+0.4	-0.1	16.5	29	
March,	-1.0	-0.7	-1.1	-0.9	+0.8	+0.1	+1.1	+1.2	+1.7	+2.0	+2.8	+2.0	+2.2	+1.5	+1.1	+0.4	+0.6	-0.6	-0.6	-1.5	-2.8	-2.0	-2.6	-2.5	16.1	26	
April,	-2.3	-1.6	-0.8	-1.8	-1.1	+1.3	+1.9	+2.1	+2.4	+2.1	+3.1	+2.6	+1.8	+1.4	+0.8	0.0	+0.2	-0.7	-1.6	-2.0	-1.4	-1.5	-1.9	-2.2	16.5	27	
May,	-0.9	-2.1	-1.7	-0.9	-1.6	-1.5	-0.7	+0.1	+0.8	+1.8	+2.7	+2.5	+2.4	+2.1	+2.5	+2.0	+0.6	-0.5	-1.3	-1.2	-1.6	-0.7	-1.0	-0.9	14.4	26	
June,	-0.4	-0.5	-1.0	-2.3	-1.7	-1.5	-1.2	+0.3	+0.2	+1.1	+1.9	+2.3	+2.3	+3.2	+2.4	+1.7	0.0	-0.7	-0.7	-1.5	-0.6	-0.2	-1.2	-0.9	11.3	27	
July,	-1.7	-1.9	-1.7	-0.5	-0.2	+0.1	-1.6	-1.1	+0.2	+0.6	+1.9	+1.4	+2.9	+2.2	+2.7	+2.7	+2.0	+0.9	+0.2	-0.6	-1.5	-2.3	-2.2	-1.6	11.3	27	
August,	-1.7	-1.5	-1.1	-1.7	-2.1	-2.5	-2.9	-2.3	0.0	+1.4	+3.3	+3.2	+3.4	+4.5	+3.9	+3.6	+3.1	+1.2	-0.6	-1.6	-2.3	-2.9	-2.1	-2.5	9.3	24	
September,	-1.7	-1.3	-1.4	-1.4	-0.7	-1.7	-1.3	+0.8	+1.5	+1.8	+1.6	+2.9	+2.7	+3.0	+3.4	+2.5	+0.8	-0.2	-1.4	-1.5	-1.8	-2.3	-2.3	-1.5	9.1	23	
October,	-0.5	-0.6	-0.9	-1.6	-2.1	-1.4	-1.2	+0.6	+0.8	+1.9	+3.2	+2.7	+2.3	+1.8	+1.6	+0.5	0.0	-1.1	-1.4	-2.1	-1.8	+0.3	+0.1	-0.5	14.9	25	
November,	+0.1	-0.1	-0.4	-1.0	-0.4	-1.1	-2.0	-0.7	-0.3	+1.0	+0.9	+2.8	+2.0	+0.9	+1.5	+1.1	-0.3	-1.8	-1.8	-2.2	-0.9	+0.3	+1.1	+1.2	15.3	25	
December,	+0.1	0.0	-0.3	-0.6	+0.5	-0.4	-0.4	+0.6	+2.2	+3.2	+1.9	+1.3	-0.1	-0.3	+0.7	+0.4	-1.0	-2.3	-2.2	-1.7	-0.6	-0.5	+0.1	0.0	14.2	27	
Mean,.....	-0.8	-0.8	-0.9	-1.1	-0.8	-0.9	-0.9	0.0	+0.8	+1.5	+2.2	+2.1	+2.1	+1.9	+1.9	+1.4	+0.5	-0.7	-1.3	-1.5	-1.3	-0.9	-0.9	-1.0	13.5	26	

TABLE IX.

Mean Direction of the Wind at the Observatory and at the Peak for each Month in the Year 1886, and Mean Diurnal Variation at the Observatory.

Month.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Mean.	Observatory.	Peak.
	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.			
January,	+ 5°	- 1°	- 4°	- 2°	- 6°	- 4°	- 4°	- 3°	- 8°	+ 3°	- 5°	+ 1°	+ 4°	+ 10°	+ 11°	+ 10°	+ 8°	- 1°	0°	+ 5°	0°	- 5°	- 7°	+ 1°	E 24° N	E 23° N	
February,	- 6	- 8	- 10	- 6	- 8	- 4	- 1	- 3	- 5	+ 3	+ 2	+ 5	+ 7	+ 11	+ 2	+ 4	+ 5	+ 5	+ 7	+ 3	+ 2	- 1	- 5	- 3	E 16° N	E 12° N	
March,	- 3	- 2	0	+ 1	+ 1	- 1	+ 1	+ 3	+ 1	+ 1	+ 3	+ 5	+ 3	+ 4	+ 4	+ 4	+ 2	- 3	- 3	- 5	- 4	0	- 1	- 2	E 5° N	E 30° S	
April,	- 2	- 3	- 6	- 4	0	- 2	0	0	+ 2	- 1	0	+ 3	+ 3	+ 4	+ 7	+ 5	+ 1	0	- 1	+ 1	- 1	- 1	- 1	0	E 1° N	E 20° S	
May,	- 4	- 9	- 4	- 5	- 6	- 5	- 1	- 1	- 2	- 6	+ 1	+ 2	+ 5	+ 5	+ 8	+ 10	+ 7	+ 2	+ 1	+ 3	0	- 3	- 5	- 6	E 5° S	E 43° S	
June,	- 12	0	+ 3	+ 3	+ 3	+ 2	+ 3	+ 2	+ 2	+ 2	- 10	+ 10	+ 8	+ 10	+ 9	+ 10	+ 5	- 2	- 7	- 12	- 14	- 15	- 9	- 4	E 44° S	S	
July,	+ 3	+ 10	+ 23	+ 13	+ 3	+ 6	- 5	- 11	- 19	- 8	- 5	- 7	+ 1	+ 7	- 9	+ 2	+ 7	+ 3	+ 3	- 1	- 9	- 6	- 2	+ 2	E 41° S	E 83 S	
August,	+ 3	+ 13	+ 19	+ 22	+ 22	+ 26	+ 32	+ 28	+ 10	+ 11	+ 9	- 1	+ 4	0	- 7	- 7	- 22	- 19	- 25	- 22	- 28	- 28	- 23	- 14	S 10° W	S 18° W	
September,	- 21	- 14	- 27	- 31	- 31	- 32	- 30	- 42	- 40	- 19	+ 3	+ 29	+ 30	+ 39	+ 38	+ 34	+ 28	+ 25	+ 24	+ 24	+ 22	+ 10	+ 2	- 7	E 19° N	E 13° N	
October,	+ 1	- 3	- 6	- 9	- 8	- 9	- 9	- 10	- 8	0	+ 4	+ 6	+ 8	+ 10	+ 11	+ 10	+ 8	+ 9	+ 3	- 2	- 3	- 5	0	+ 1	E 11° N	E 5° N	
November,	0	- 4	- 15	- 20	- 27	- 26	- 23	- 24	- 10	- 8	+ 4	+ 13	+ 17	+ 23	+ 20	+ 14	+ 12	+ 11	+ 11	+ 8	+ 8	+ 6	+ 4	E 23° N	E 16° N		
December,	- 1	- 4	- 10	- 18	- 20	- 24	- 26	- 12	- 3	+ 9	+ 12	+ 16	+ 11	+ 14	+ 17	+ 15	+ 11	+ 6	+ 7	+ 8	+ 6	+ 8	+ 2	E 36° N	E 23° N		
Mean,.....	- 3	- 2	- 3	- 5	- 6	- 6	- 5	- 7	- 7	- 2	+ 1	+ 6	+ 9	+ 11	+ 9	+ 9	+ 6	+ 3	+ 2	0	- 2	- 3	- 3	- 2	E 5° S	E 23° S	

TABLE X.

Total Distance traversed by, as well as Total Duration and Average Velocity of Winds from eight different points of the Compass during the Year 1886.

annual

WIND.	Total Distance. Miles.	Duration. Hours.	Velocity.
			Miles per Hour.
	12683	1011	12.5
	11658	887	13.1
	72495	4219	17.2
	5658	538	10.5
	5227	520	10.1
	6044	504	12.0
	3342	431	7.8
	1418	214	6.6
	208	436	0.5
Sums and Mean,.....	118733	8760	13.5

TABLE XI.

Total Rainfall, Duration of Rain, and Number of Days on which Rain was collected at the Observatory, Stone Cutters' Island and the Peak for each month of the Year 1886.

Month.	OBSERVATORY.			STONE CUTTERS' ISLAND.		VICTORIA PEAK.	
	Amount. ins.	Duration. hrs.	Days.	Amount. ins.	Days.	Amount. ins.	Days.
January,	2.015	93	10	2.05	8	2.67	6
February,	1.535	127	9	1.40	2	2.53	7
March,	2.590	72	10	1.26	4	3.25	6
April,	5.680	99	12	3.77	9	6.36	9
May,	3.560	85	7	2.59	4	4.97	6
June,	8.875	122	21	10.02	18	17.34	18
July,	28.320	163	25	28.62	24	31.02	17
August,	8.955	62	14	8.12	14	10.48	8
September,	2.995	22	8	3.28	8	4.42	4
October,	2.815	26	7	3.11	5	1.71	1
November,	0.050	4	2	...	0	...	0
December,	1.775	54	4	1.16	3	2.66	3
Year,.....	69.165	929	129	65.38	99	87.41	85

TABLE XII.

Total Number of Days on which Different Meteorological Phenomena were noted and Total Number of Thunderstorms during each Month of the Year 1886.

Month.	Fog.	Electric Phenomena.	Lightning.	Thunder.	Thunderstorms.	Unusual Visibility.	Dew.	Rainbows.	Lunar Halo.	Lunar Corona.	Solar Halo.	Solar Corona.
January,	1	...	...	...	...	1	...	...	1	...	1	...
February,	3	...	...	...	...	2	...	...	...	...	...	...
March,	8	5	5	5	4	...	3	...	1	...	2	1
April,	4	8	5	7	2	2	6	...	...	...	2	...
May,	1	9	9	1	1	4	9	...	...	2	...	...
June, .....	...	12	12	3	1	3	8	1	6	6	3	...
July, .....	...	20	19	9	4	1	2	3	4	3	8	2
August, .....	...	24	20	12	3	7	6	4	4	...	7	8
September,	3	9	9	5	3	5	7	1	1	5	2	2
October,	2	3	3	1	1	3	5	2	1	...	1	1
November, .....	...	...	...	...	...	3	2	...	...	3	...	...
December,	1	...	...	...	...	3	2	...	...	...	...	...
Sums,.....	23	90	82	43	19	34	50	11	18	19	26	14

TABLE XIII.

Total Number of Times that Clouds of different forms were observed in each Month of the Year 1886.

Month.	c.	c-str.	c-cum.	sm-cum.	cum.	cum-str.	str.	R-cum.	cum-nim.	nim.
January, .....	...	19	9	22	63	2	11	8	53	37
February, .....	...	2	...	17	67	...	40	13	64	52
March, .....	...	10	4	10	99	...	19	17	64	47
April,	3	14	5	16	116	...	11	6	69	46
May,	3	25	25	28	157	...	9	4	56	31
June,	3	46	27	23	119	11	8	8	49	53
July,	17	59	31	10	136	8	12	4	54	60
August,	14	78	34	31	176	15	7	6	44	26
September,	8	41	46	46	117	3	7	3	20	9
October,	4	6	19	14	140	...	13	9	+	13
November,	2	32	19	18	114	...	3	3	13	...
December,	1	20	4	10	47	...	11	2	16	22
Sums,.....	55	352	223	245	1351	39	151	83	533	396

TABLE XIV.

Mean Percentage of Clouded Sky and Mean Diurnal Variation in each Month of the Year 1886.

Month.	1 a.	4 a.	7 a.	10 a.	1 p.	4 p.	7 p.	10 p.	Mean.
January,	- 1	+ 3	+ 5	+ 1	- 1	- 1	- 3	- 2	65
February,	+ 3	+ 2	+ 1	- 1	- 1	0	- 5	+ 3	96
March,	+ 3	- 1	+ 3	- 2	- 1	- 4	0	+ 1	92
April,	+ 6	- 1	+ 4	+ 1	- 1	- 3	- 3	- 1	82
May,	0	+ 4	+ 11	+ 3	0	- 9	- 5	- 5	71
June,	- 8	+ 2	+ 8	- 1	+ 6	+ 7	- 1	- 15	76
July,	- 6	+ 5	+ 1	+ 1	+ 2	+ 10	+ 6	- 19	76
August,	+ 1	0	- 4	- 5	+ 1	+ 14	+ 7	- 11	71
September,	- 3	+ 13	+ 3	- 12	+ 1	- 1	- 6	+ 2	51
October,	+ 6	+ 15	+ 9	- 4	- 6	- 9	- 9	0	48
November,	+ 16	+ 16	- 3	- 13	- 11	- 8	- 8	+ 12	35
December,	+ 4	+ 7	- 2	- 5	- 1	- 1	- 2	+ 3	31
	+1.7	+5.4	+3.0	-3.1	-1.0	-0.4	-2.4	-2.7	66

TABLE XV.

Mean Sea Disturbance in each Month of the Year 1886.

Month.	4 a.	10 a.	4 p.	10 p.	Mean.
January,	2.3	2.6	2.1	2.5	2.4
February,	2.9	2.6	2.4	2.7	2.6
March,	1.7	2.1	1.6	1.5	1.7
April,	2.0	2.4	2.4	1.9	2.2
May,	1.6	1.9	1.8	1.7	1.8
June,	1.7	1.9	1.8	1.7	1.8
July,	1.5	1.7	1.7	1.6	1.6
August,	1.0	1.3	1.4	1.1	1.2
September,	1.4	2.0	1.6	1.4	1.6
October,	3.0	3.2	3.0	3.0	3.0
November,	2.7	3.1	2.8	2.8	2.9
December,	2.2	2.4	1.9	2.2	2.2
	2.0	2.3	2.0	2.0	2.1

TABLE XVI.

Monthly Extremes of the Principal Meteorological Elements registered at the Observatory during the Year 1886.

Month.	Barometer.		Temperature.		Humidity.	Vapour Tension.		Rain.		Wind Velocity.	Radiation.	
	Max.	Min.	Max.	Min.		Min.	Max.	Min.	Daily Max.	Hourly Max.	Sun Max.	Terr. Min.
1886.												
January,	30.331	29.686	74.4	41.8	24	0.549	0.102	0.775	0.210	41	142.0	38.3
February, .....	.272	.772	63.5	43.7	32	.499	.115	0.540	0.195	46	128.0	44.7
March, .....	.150	.683	76.3	52.0	64	.717	.310	0.960	0.675	46	132.4	50.7
April, .....	.017	.623	78.3	60.5	50	.823	.357	1.815	0.600	35	142.8	57.7
May,	29.997	.654	88.3	65.8	42	.911	.314	1.265	0.315	30	153.3	60.4
June, .....	.880	.426	87.8	70.7	57	.966	.638	2.595	0.630	37	153.3	68.5
July, .....	.823	.475	88.4	73.9	63	.957	.750	13.480	3.480	38	156.8	70.9
August, .....	.815	.403	89.7	74.7	62	.952	.755	4.230	1.240	34	156.8	73.3
September, .....	.951	.547	88.4	72.3	34	.896	.360	1.040	0.990	30	155.2	67.3
October,	30.117	.606	86.1	60.8	41	.869	.292	2.240	1.075	38	147.0	60.8
November, .....	.183	.720	80.0	58.1	26	.617	.194	0.030	0.025	38	142.2	53.1
December, .....	.260	.890	71.5	50.8	14	.487	.064	1.115	0.165	54	132.6	40.5
Year,	30.331	29.403	89.7	41.8	14	0.966	0.064	13.480	3.480	54	156.8	38.3

TABLE XVII.

Monthly Extremes of the Principal Meteorological Elements registered at Victoria Peak during the Year 1886.

Month.	Barometer.		Temperature.		Humidity.	Vapour Tension.		Rain.	Wind Force.	Radiation.	
	Max.	Min.	Max.	Min.		Min.	Max.	Min.	Daily Max.	Max.	Sun Max.	Terr. Min.
1886.											
January,	28.493	27.957	61.8	36.0	57	0.531	0.150	1.56	6	142.0	31.5
February, .....	.448	28.057	62.0	36.7	66	.490	.168	1.12	7	129.4	33.7
March, .....	.345	27.983	68.8	47.8	57	.664	.265	1.15	7	138.0	45.3
April, .....	.251	.934	74.5	54.8	78	.726	.422	2.10	6	141.0	55.3
May, .....	.243	.970	78.0	61.3	71	.851	.432	3.89	7	146.4	58.1
June, .....	.146	.764	79.2	64.8	70	.882	.575	5.12	7	148.2	63.6
July, .....	.137	.823	81.0	69.8	82	.894	.706	14.56	7	151.0	67.2
August, .....	.105	.748	81.1	70.0	82	.882	.730	5.18	6	153.9	68.2
September, .....	.225	.889	81.5	66.1	56	.858	.469	1.98	7	152.9	59.4
October, .....	.329	.945	79.7	58.5	54	.812	.321	1.71	7	144.3	51.2
November, .....	.387	28.002	70.3	48.3	44	.564	.196	...	6	134.0	46.2
December, .....	.440	.119	65.3	40.1	24	.406	.100	1.46	7	124.2	41.2
Year,	28.493	27.748	81.5	36.0	24	0.894	0.100	14.56	7	153.9	31.5

TABLE XVIII.

Average Readings of Solar Radiation Thermometers and Excess over Maximum Thermometers as well as Excess of Minimum over Terrestrial Radiation Thermometers, Mean Weight of Aqueous Vapour in Troy Grains in each cubic foot of air and Diurnal Range of Temperature at the Observatory and at the Peak, and average height in feet at which the Temperature of the air was 1° lower during 1886.

Muse.

Month.	Solar Radiation Thermometer.		Solar Radiation. Excess over Maximum.		Terrestrial Radiation.		Weight of Aqueous Vapour.		Diurnal Range.		Height of 1° Decrease.
	Observatory.	Peak.	Observatory.	Peak.	Observatory.	Peak.	Observatory.	Peak.	Observatory.	Peak.	
1886.											
January,	112.0	107.6	49.9	52.0	+3.3	+3.4	3.74	3.92	6.6	5.3	299
February,	98.3	97.2	41.9	46.0	+0.9	+1.9	3.53	3.51	5.6	7.0	294
March,	117.2	113.7	51.5	50.6	+0.9	+1.7	5.41	5.41	6.6	8.1	656
April,	121.8	114.9	49.5	46.7	+1.3	+1.6	6.80	6.52	5.4	5.6	406
May,	137.8	127.2	58.2	54.4	+1.9	+2.1	7.85	7.39	6.7	5.2	294
June,	138.6	130.0	55.3	53.8	+2.8	+1.2	8.96	8.29	6.4	5.8	258
July,	138.1	131.6	53.9	54.8	+2.7	+1.1	9.19	8.60	6.8	4.5	267
August,	145.4	136.2	59.9	58.4	+1.6	+1.8	9.26	8.72	7.6	4.9	280
September,	143.9	140.0	59.6	62.7	+4.1	+3.9	7.30	7.18	8.1	6.8	280
October,	138.5	131.6	58.3	56.9	+3.0	+2.7	7.19	6.95	6.3	7.2	280
November,	132.5	124.5	59.5	57.9	+4.4	+2.6	4.60	4.53	7.6	9.3	234
December,	117.1	114.1	52.9	56.7	+5.5	+0.2	3.16	3.18	8.5	12.1	222
Mean,	128.4	122.4	54.2	54.2	+2.7	+2.0	6.42	6.18	6.8	6.8	314

W. DOBERCK,
Government Astronomer.

Hongkong Observatory, 7th February, 1887.

FIVE-DAY MEANS OF THE PRINCIPAL METEOROLOGICAL ELEMENTS FOR 1886.

The following five-day means have been constructed according to the recommendations of the International Meteorological Congress.

Hongkong Observatory: The first column exhibits the height of the barometer in inches reduced 32° Fahrenheit but not to sea level. The cistern is 110 feet above mean sea level. The means have been derived from the hourly readings.

The second column exhibits the temperature in degrees Fahrenheit as derived from the hourly readings.

The third and fourth columns exhibit the relative humidity in percentage of saturation and the vapour tension in inches of mercury as derived from the means of the hourly readings of the dry and wet bulb thermometers.

The fifth column exhibits the velocity of the wind in miles per hour derived from the hourly readings.

The sixth column exhibits the percentage of the whole sky, that was covered by clouds, from observations made every three hours.

The seventh column exhibits the average daily number of hours during which the sun shone brightly enough to mark the cards.

The eighth column exhibits the average amount of rain in inches that fell in one day, from midnight to mid-night as derived from the hourly readings.

Victoria Peak: The first column exhibits the height of the barometer in inches reduced to 32° Fahrenheit but not to sea level as derived from tri-diurnal observations. The cistern is 1816 feet above mean sea level.

The second column exhibits the temperature as derived from observations made at 10 a. and 10 p.

The third and fourth columns exhibit the relative humidity and tension of vapour as derived from tri-diurnal observations.

The fifth column exhibits the force of the wind (0-12) as derived from tri-diurnal observations.

The sixth column exhibits the average amount of rain in inches, that fell in one day as measured 10 a. and entered to preceding day.

The five-day means of temperature in 1884, derived from observations made in STEVENSON'S screen at 10 a. and 10 p. and reduced to true air temperature and mean of 24 hours are as follows:—
21, 57.2, 62.5, 60.2, 62.7, 64.2, 57.0, 51.0, 55.6, 58.9, 58.2, 60.2, 60.4, 60.0, 61.3, 61.1, 63.9, 63.7, 61.1, 64.0, 65.8, 66.9, 72.0, 69.3, 72.3, 73.9, 69.3, 73.6, 75.4, 75.0, 76.5, 76.0, 78.6, 80.7, 79.3, 81.3, 80.3, 80.9, 82.5, 83.3, 82.2, 80.3, 80.5, 82.1, 82.1, 78.3, 83.1, 81.0, 81.0, 81.8, 79.8, 80.8, 80.9, 78.5, 78.6, 80.0, 80.1, 75.2, 74.7, 73.0, 76.5, 74.6, 70.3, 70.7, 64.8, 58.4, 61.4, 62.4, 59.7, 60.2, 59.5, 59.8, 57.7.

HONGKONG OBSERVATORY.

Five-Day Period. 1886.	Barometer.	Tempera- ture.	Humidity.	Vapour Tension.	Wind Velocity.	Nebulosity.	Sunshine.	Rain.
January 1- 5	30.204	58.5	48	0.238	9.1	0.1	9.8	0.000
" 6-10	.120	63.1	60	.348	12.2	6.6	4.8	0.000
" 11-15	.099	60.3	64	.337	16.5	4.5	7.3	0.004
" 16-20	.013	59.8	77	.396	12.5	9.9	0.6	0.005
" 21-25	29.793	60.6	88	.466	18.2	9.6	1.3	0.087
" 26-30	.985	52.0	74	.293	12.5	8.9	1.6	0.307
February 31- 4	30.073	50.1	56	.212	24.0	8.1	2.1	0.005
" 5- 9	.027	53.6	71	.303	16.6	9.2	2.4	0.174
" 10-14	.051	53.3	76	.310	14.4	9.8	1.1	0.108
" 15-19	.102	53.4	83	.340	21.5	9.9	0.1	0.003
" 20-24	.153	52.9	73	.294	6.8	9.9	0.6	0.007
" 25- 1	29.994	58.0	88	.427	18.6	9.6	1.0	0.010
March 2- 6	30.011	69.3	89	.474	14.6	9.7	1.1	0.001
" 7-11	.038	60.8	81	.435	20.4	8.7	2.3	0.003
" 12-16	29.875	64.0	93	.561	17.0	8.9	2.7	0.213
" 17-21	.933	65.5	90	.568	13.9	8.0	4.9	0.005
" 22-26	.893	60.7	86	.475	11.0	9.8	1.0	0.254
" 27-31	.981	61.2	83	.456	17.6	9.5	0.2	0.042
April 1- 5	.836	69.9	94	.693	15.5	8.0	3.5	0.003
" 6-10	.892	70.7	88	.660	15.8	7.2	5.6	0.002
" 11-15	.737	69.6	91	.661	14.0	8.7	2.0	0.301
" 16-20	.783	67.3	85	.572	22.7	9.6	1.2	0.425
" 21-25	.903	70.3	85	.631	17.2	9.0	2.8	0.362
" 26-30	.918	68.6	78	.547	13.9	6.8	4.9	0.041
May 1- 5	.868	71.9	83	.652	15.7	6.9	4.9	0.003
" 6-10	.807	70.3	71	.582	19.3	8.5	4.3	0.264
" 11-15	.775	75.4	89	.783	14.8	9.4	3.2	0.005
" 16-20	.775	79.5	82	.830	8.3	4.7	9.4	0.001
" 21-25	.792	79.0	82	.811	11.4	5.3	8.4	0.010
" 26-30	.812	77.6	80	.764	17.7	7.3	5.7	0.003
June 31- 4	.672	78.8	88	.862	12.6	9.6	0.8	1.250
" 5- 9	.708	79.6	88	.893	11.7	7.1	5.4	0.161
" 10-14	.572	77.5	85	.799	12.9	9.3	1.6	0.235
" 15-19	.655	78.9	77	.764	9.1	4.8	8.4	0.127
" 20-24	.781	81.0	83	.875	8.4	7.7	7.2	0.001
" 25-29	.683	82.2	79	.866	12.4	7.9	6.2	0.401
" 30- 4	.707	82.3	80	.886	11.5	7.4	7.7	0.140
July 5- 9	.763	79.2	85	.848	10.9	7.5	5.2	0.562
" 10-14	.683	80.9	84	.882	14.3	7.6	6.0	0.617
" 15-19	.645	78.1	86	.831	17.5	9.5	1.5	3.837
" 20-24	.623	80.7	81	.850	8.8	7.0	7.5	0.199
" 25-29	.597	81.8	82	.898	8.0	7.0	7.1	0.289
August 30- 3	.659	82.8	80	.902	10.7	7.2	6.1	0.099
" 4- 8	.715	83.0	78	.882	7.9	6.7	7.7	0.002
" 9-13	.585	81.7	79	.855	6.9	6.7	7.8	0.118
" 14-18	.531	81.6	82	.887	12.0	9.0	4.1	0.137
" 19-23	.611	80.8	84	.880	7.4	5.1	8.8	0.009
" 24-28	.692	78.7	87	.851	10.8	7.8	4.6	1.350
September 29- 2	.742	79.9	85	.868	6.6	7.4	6.0	0.179
" 3- 7	.703	80.6	72	.752	5.5	4.1	9.0	0.208
" 8-12	.723	78.4	61	.593	8.1	6.6	6.2	0.004
" 13-17	.706	80.2	64	.666	4.2	6.1	8.2	0.000
" 18-22	.659	82.1	72	.798	8.6	6.9	7.2	0.318
" 23-27	.810	78.2	61	.590	14.0	2.3	10.1	0.013
October 28- 2	.877	78.0	66	.636	21.1	3.7	9.5	0.000
" 3- 7	.851	77.7	69	.651	12.1	5.2	5.8	0.000
" 8-12	.744	79.0	73	.732	11.7	2.8	9.1	0.448
" 13-17	.898	76.0	69	.624	22.6	7.2	4.7	0.005
" 18-22	.896	77.7	79	.752	12.4	4.5	7.0	0.019
" 23-27	29.887	76.7	79	.730	15.7	4.9	7.7	0.091
November 28- 1	30.014	71.3	63	.502	11.5	3.7	9.2	0.000
" 2- 6	.030	72.2	65	.513	19.3	2.8	9.4	0.000
" 7-11	.032	70.5	59	.441	12.7	4.6	9.6	0.009
" 12-16	30.020	69.7	59	.430	14.1	3.4	10.0	0.000
" 17-21	29.985	68.0	52	.354	14.0	4.1	8.5	0.000
" 22-26	30.072	66.5	59	.386	15.9	1.5	8.5	0.000
December 27- 1	.033	66.0	63	.413	16.7	4.6	7.9	0.001
" 2- 6	.076	63.5	63	.369	16.4	2.0	9.6	0.000
" 7-11	.165	59.9	35	.184	14.1	0.1	9.7	0.000
" 12-16	.043	58.6	50	.251	16.8	4.3	5.8	0.032
" 17-21	.063	60.5	65	.343	12.7	3.3	7.0	0.060
" 22-26	.077	57.5	66	.314	13.6	5.8	5.3	0.263
" 27-31	.085	58.9	49	.251	11.2	3.2	6.1	0.000

VICTORIA PEAK.

Five-Day Period. 1886.	Barometer.	Temperature.	Humidity.	Vapour Tension.	Wind Force.	Rain.
January 1-5	28.400	51.7	72	0.288	3.9	0.00
..... 6-10	.338	55.5	79	.357	4.3	0.00
..... 11-15	.287	54.6	80	.346	4.8	0.00
..... 16-20	.229	54.3	91	.388	4.3	0.00
..... 21-25	.028	57.3	97	.465	5.1	0.22
..... 26-30	.176	47.7	87	.301	5.1	0.31
February 1-4	.232	42.2	80	.224	5.3	0.06
..... 5-9	.204	49.1	87	.324	5.5	0.22
..... 10-14	.234	46.5	91	.297	5.0	0.08
..... 15-19	.297	46.9	94	.310	5.9	0.11
..... 20-24	.339	47.0	86	.289	4.9	0.00
..... 25-1	.211	55.4	94	.425	4.6	0.04
..... 2-6	.248	59.6	89	.477	4.4	0.00
..... 7-11	.259	58.0	86	.434	5.4	0.00
..... 12-16	.143	63.2	94	.564	4.4	0.28
..... 17-21	.180	64.5	90	.570	3.8	0.00
..... 22-26	.132	58.2	91	.463	5.0	0.38
..... 27-31	.195	54.9	95	.427	5.0	0.04
March 1-5	.114	66.9	96	.653	4.7	0.00
..... 6-10	.152	66.8	95	.641	4.8	0.00
..... 11-15	.014	66.1	96	.625	4.1	0.42
..... 16-20	.043	61.9	93	.532	5.3	0.39
..... 21-25	.163	64.7	95	.591	4.9	0.42
..... 26-30	.181	63.4	89	.538	4.6	0.05
April 1-5	.139	66.0	91	.600	4.8	0.00
..... 6-10	.071	64.5	85	.529	5.2	0.16
..... 11-15	.074	69.6	96	.708	4.8	0.00
..... 16-20	.091	72.6	95	.774	4.3	0.00
..... 21-25	.102	73.5	90	.765	3.9	0.00
..... 26-30	.098	70.6	92	.710	4.8	0.06
May 1-4	27.976	72.8	95	.769	4.9	2.73
..... 5-9	28.020	73.6	95	.801	3.8	0.20
..... 10-14	27.869	70.3	94	.714	4.6	0.44
..... 15-19	.974	72.8	86	.702	4.5	0.24
..... 20-24	28.093	74.1	94	.800	4.8	0.09
..... 25-29	.002	74.3	95	.807	5.9	0.55
..... 30-4	.026	74.7	96	.831	5.5	0.05
..... 5-9	.073	74.0	91	.773	4.5	0.68
..... 10-14	.000	74.2	95	.815	5.1	1.06
..... 15-19	27.954	72.1	96	.761	5.0	3.81
..... 20-24	.936	73.5	95	.795	4.8	0.12
..... 25-29	.926	74.9	94	.835	4.1	0.44
June 30-3	.971	75.0	96	.846	5.1	0.06
..... 4-8	28.039	75.3	93	.824	4.1	0.00
..... 9-13	27.901	74.9	94	.815	4.3	0.16
..... 14-18	.846	74.6	96	.830	5.1	0.18
..... 19-23	.938	75.9	89	.812	2.7	0.00
..... 24-28	.990	72.9	95	.778	4.9	1.71
July 29-2	28.046	74.6	91	.787	3.2	0.05
..... 3-7	.006	74.7	83	.723	3.5	0.28
..... 8-12	.021	72.0	74	.596	4.0	0.03
..... 13-17	.008	74.0	75	.642	3.4	0.00
..... 18-22	27.976	76.3	82	.772	3.6	0.57
..... 23-27	28.101	71.3	74	.590	4.6	0.00
August 28-2	.162	70.6	81	.622	5.5	0.00
..... 3-7	.133	71.1	80	.627	4.5	0.00
..... 8-12	.037	72.3	88	.722	3.9	0.34
..... 13-17	.167	68.7	84	.614	5.8	0.00
..... 18-22	.174	71.3	90	.714	3.9	0.00
..... 23-27	.169	70.2	86	.655	4.3	0.00
September 28-1	.270	66.6	72	.479	4.0	0.00
..... 2-6	.284	63.3	80	.486	4.3	0.00
..... 7-11	.280	63.0	72	.438	3.7	0.00
..... 12-16	.258	62.3	73	.425	4.6	0.00
..... 17-21	.234	60.1	65	.357	4.5	0.00
..... 22-26	.297	59.4	69	.362	4.8	0.00
October 27-1	.274	59.1	73	.390	5.0	0.00
..... 2-6	.293	57.2	73	.358	4.1	0.00
..... 7-11	.368	52.7	44	.185	4.5	0.00
..... 12-16	.239	51.9	67	.271	4.9	0.05
..... 17-21	.273	53.0	77	.318	4.7	0.19
..... 22-26	.267	51.1	80	.314	4.4	0.29
..... 27-31	.290	51.3	62	.253	4.6	0.00

W. DOBERCK,
Government Astronomer.

HONGKONG OBSERVATORY.

Weather Report for January, 1886.

In the *China Coast Meteorological Register*, based on information transmitted by the Great Northern and the Eastern Extension Telegraph Companies, which was daily published, is given a summary of the atmospheric circumstances in Luzon and along the Coast of China. It also contains information concerning the weather in Nagasaki and Wladivostock.

Unusual visibility was noted on the 29th.

Fog occurred in the morning on the 1st and thick haze in the morning on the 11th. Fog occurred at sea level on the 10th.

A solar halo was observed on the 8th and a lunar halo on the 14th.

The total distance traversed by, as well as the duration and average velocity of winds from different quarters were as follows:—

Direction.	Total Distance. Miles.	Duration. Hours.	Velocity. Miles per hour.
			11.8
N	1977	167	11.8
NE	1571	111	14.2
E	5842	320	18.3
SE	230	27	8.5
S	25	7	3.6
SW	101	14	7.2
W	269	38	7.1
NW	151	27	5.6
Calm	21	33	0.6

TABLE I.

BAROMETRIC PRESSURE FOR THE MONTH OF JANUARY, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.
Jan. 1, ...	30.197	30.180	30.168	30.163	30.162	30.175	30.184	30.211	30.218	30.219	30.198	30.163	30.127	30.116	30.075	30.064	30.072	30.083	30.102	30.129	30.142	30.148	30.152	30.152	30.150
" 2, ...	.150	.139	.127	.128	.132	.145	.163	.189	.206	.207	.193	.166	.134	.110	.111	.117	.129	.145	.164	.182	.198	.208	.206	.210	.161
" 3, ...	.206	.203	.196	.191	.193	.209	.226	.245	.261	.260	.250	.223	.183	.167	.155	.162	.171	.188	.210	.230	.248	.250	.249	.249	.214
" 4, ...	.250	.246	.245	.248	.251	.269	.280	.302	.324	.331	.318	.284	.255	.237	.225	.222	.228	.238	.250	.265	.279	.282	.282	.280	.266
" 5, ...	.274	.267	.261	.255	.256	.267	.276	.282	.286	.284	.276	.242	.217	.192	.187	.178	.191	.186	.185	.198	.198	.201	.193	.168	.230
" 6, ...	.166	.160	.143	.141	.154	.151	.151	.170	.181	.178	.168	.137	.104	.084	.066	.065	.061	.064	.074	.086	.088	.105	.103	.097	.121
" 7, ...	.082	.082	.084	.088	.095	.103	.130	.155	.175	.186	.179	.137	.104	.093	.077	.083	.098	.112	.127	.136	.141	.147	.135	.133	.120
" 8, ...	.127	.122	.118	.112	.122	.134	.157	.161	.179	.186	.186	.165	.130	.102	.087	.086	.098	.106	.120	.135	.149	.152	.155	.151	.135
" 9, ...	.148	.142	.144	.151	.154	.161	.173	.192	.200	.208	.193	.170	.119	.094	.083	.082	.102	.108	.119	.140	.151	.155	.152	.151	.145
" 10, ...	.138	.125	.118	.105	.107	.108	.117	.129	.139	.140	.125	.086	.045	.019	.001	.000	.012	.028	.040	.057	.071	.079	.080	.076	.081
" 11, ...	.071	.056	.047	* .043	* .045	* .052	* .067	* .086	* .102	.106	.093	.064	.028	.009	29.985	29.988	.004	.015	.040	.068	.100	.126	.136	.135	.061
" 12, ...	.135	.131	.134	.136	.138	.155	.182	.202	.215	.227	.238	.208	.171	.120	30.106	30.116	.125	.128	.148	.156	.168	.166	.151	.153	.159
" 13, ...	.164	.158	.148	.138	.133	.121	* .116	* .137	* .148	.147	.117	.090	.062	.041	.022	.011	.029	.044	.051	.066	.096	.115	.115	.099	
" 14, ...	.111	.096	.079	* .075	* .077	* .084	.099	* .117	* .133	.137	.133	.097	.052	.026	.006	.010	.018	.036	.050	.077	.097	.103	.105	.109	.080
" 15, ...	.101	.103	.099	.101	.103	.111	.121	.154	.167	.152	.139	.134	.087	.069	.050	.054	.051	.060	.061	.073	.082	.083	.089	.086	.097
" 16, ...	.091	.054	.052	.030	.027	.035	.051	.072	.092	.107	.093	.065	.023	29.999	29.986	29.986	29.985	29.996	.012	.032	.039	.041	.047	.041	.040
" 17, ...	.038	.049	.039	.026	.028	.037	.055	.078	.111	.125	.108	.081	.058	30.029	30.008	30.000	30.006	30.029	.048	.065	.091	.100	.103	.110	.059
" 18, ...	.105	.098	.098	.094	.094	.103	.118	.138	.163	.159	.155	.117	.075	.053	.030	.019	.031	.039	.047	.057	.065	.071	.072	.068	30.086
" 19, ...	.055	.047	.022	.002	29.988	29.998	.000	.011	.030	.045	.016	29.987	29.948	29.930	29.911	29.909	29.903	29.903	29.922	29.929	29.944	29.945	29.943	29.944	29.972
" 20, ...	29.939	29.934	29.923	29.912	.916	.920	29.953	* 29.965	* 29.974	29.977	29.953	.927	.887	.864	.842	.842	.862	.859	.875	.888	.896	.897	.892	.877	.907
" 21, ...	.858	.849	.839	.837	.832	.847	.855	.879	.881	.898	.884	.853	.824	.800	.794	.779	.784	.805	.802	.821	.807	.817	.828	.818	.833
" 22, ...	.797	.795	.778	.779	.777	.790	.794	.815	.822	.810	.793	.770	.745	.716	.695	.686	.690	.694	.709	.726	.729	.749	.750	.746	.756
" 23, ...	.737	.727	.732	.732	.740	.762	.797	.811	.847	.842	.829	.824	.787	.776	.776	.786	.795	.815	.836	.854	.855	.851	.865	.868	.802
" 24, ...	.851	.835	.835	.824	.817	.819	.830	.849	.872	.872	.838	.816	.777	.754	.742	.738	.745	.752	.754	.776	.783	.789	.788	.784	.802
" 25, ...	.767	.755	.743	.735	.740	* .753	* .772	* .792	* .806	.805	.780	.751	.727	.725	.729	.746	.773	.787	.805	* .825	.831	.844	.844	.777	
" 26, ...	.845	.840	.839	.841	.843	.868	.904	.937	.947	.945	.950	.931	.899	.886	.866	.868	.881	.880	.895	.913	.918	.929	.933	.895	
" 27, ...	.929	.918	.914	.902	.901	.905	.931	.952	.966	.984	.989	.966	.938	.914	.897	.897	.912	.929	.937	.958	.966	.968	.977	.974	.939
" 28, ...	.950	.958	.948	.925	.916	.928	.958	.971	30.010	30.012	30.022	30.008	.959	.948	.931	.943	.956	.971	.975	.997	30.001	30.007	30.031	30.011	.972
" 29, ...	30.008	.984	.956	.956	.925	.919	.942	.965	.009	.000	.000	29.999	.959	.934	.916	.920	.927	.954	.983	30.012	.048	.065	.076	.075	29.980
" 30, ...	.092	30.050	30.052	30.055	30.081	30.113	30.134	30.156	.179	.185	.194	30.165	30.122	30.115	30.101	30.104	30.122	30.141	30.157	.183	.193	.198	.209	.228	30.139
" 31, ...	.214	.214	.194	.163	.154	.193	.208	.230	.253	.262	.247	.202	.165	.133	.113	.118	.119	.133	.167	.172	.167	.161	.155	.177	
Hourly Means,																									
	30.051	30.042	30.035	30.029	30.029	30.040	30.056	30.076	30.093	30.097	30.087	30.060	30.024	30.002	29.986	29.986	29.995	30.006	30.020	30.038	30.050	30.056	30.059	30.056	30.040

* Interpolated.

† Approximate.

TABLE II.

TEMPERATURE FOR THE MONTH OF JANUARY, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.	Max.	Min.
Jan. 1,.....	57.0	56.3	55.9	55.5	55.6	55.5	55.5	57.0	58.8	60.8	62.4	64.0	65.2	66.3	64.7	65.5	64.9	63.6	62.9	62.5	62.1	61.5	60.0	58.8	60.5	66.8	55.3
" 2,.....	56.9	55.2	53.6	53.6	53.6	54.1	54.3	55.5	57.7	59.5	60.8	61.5	62.1	62.9	62.5	62.2	60.7	59.8	58.4	57.4	57.2	59.2	58.4	57.3	58.1	63.6	53.6
" 3,.....	56.5	56.1	55.1	55.3	55.8	55.4	55.3	56.5	57.9	59.8	61.5	62.0	62.6	63.5	64.3	64.0	62.5	60.8	58.9	58.8	59.0	57.7	56.6	56.8	58.9	64.3	55.1
" 4,.....	55.7	55.3	55.2	54.8	54.5	53.7	53.8	54.8	56.4	58.2	60.8	61.6	62.5	63.9	63.5	63.2	60.8	59.4	57.7	56.7	56.6	57.3	57.1	55.9	57.9	63.9	53.5
" 5,.....	54.8	54.2	53.8	53.5	54.4	53.8	54.3	54.8	55.4	57.2	58.9	60.2	60.5	60.5	59.7	59.0	58.8	58.6	57.7	57.6	58.0	58.3	58.4	58.2	57.3	60.9	53.4
" 6,.....	57.8	57.4	57.2	57.0	56.5	55.4	55.0	55.8	56.7	58.9	59.6	59.7	60.3	61.5	62.2	61.3	60.6	59.3	59.1	59.5	59.9	60.5	60.5	58.8	62.7	55.0	
" 7,.....	60.7	60.7	60.7	60.8	60.9	61.2	61.3	61.9	63.3	64.3	65.2	66.0	65.5	66.2	65.5	65.1	63.6	62.2	61.7	61.6	61.7	62.2	62.1	62.2	62.8	66.3	60.5
" 8,.....	61.6	61.5	61.3	61.1	61.9	61.9	60.7	61.3	64.0	66.7	66.5	67.5	67.5	67.6	67.5	66.8	66.2	64.5	63.6	63.2	63.1	62.8	62.0	61.8	63.9	67.6	60.6
" 9,.....	62.2	63.3	62.9	63.2	63.3	63.9	64.1	63.9	66.7	70.5	71.3	72.7	73.5	74.3	73.3	67.6	65.7	64.8	64.6	64.4	64.3	63.2	63.3	66.3	74.4	61.8	
" 10,.....	63.5	63.1	64.0	64.0	63.9	63.8	63.4	63.9	64.6	66.3	66.3	66.1	65.4	64.6	64.9	64.5	63.8	62.4	62.4	62.3	62.2	62.1	61.7	61.0	63.7	66.3	60.9
" 11,.....	61.4	61.3	61.2	59.7	59.4	59.5	58.9	59.9	62.4	64.6	67.0	69.3	70.5	70.5	69.5	69.4	67.4	64.5	63.6	66.4	63.3	62.7	61.7	61.1	64.0	70.8	58.9
" 12,.....	60.5	59.9	59.3	58.7	58.2	58.2	58.1	58.3	58.6	58.5	59.0	59.3	58.9	58.9	58.5	58.4	57.4	57.5	57.7	58.4	58.4	58.6	58.3	58.6	61.1	57.4	
" 13,.....	58.2	57.6	57.7	57.2	57.1	56.6	56.8	57.6	58.4	59.5	59.6	59.8	60.1	60.6	60.8	60.7	60.7	59.9	60.2	60.3	60.6	60.7	60.7	60.4	59.2	61.1	56.5
" 14,.....	60.4	60.5	60.1	60.5	60.3	59.5	58.9	61.2	61.6	61.8	62.8	63.5	65.4	65.8	65.5	64.8	62.8	61.5	60.6	59.6	59.1	58.2	56.9	56.6	61.2	65.9	56.6
" 15,.....	56.9	56.1	55.8	55.4	56.0	56.3	56.4	57.2	58.5	58.8	59.6	59.5	59.5	59.4	59.2	59.1	58.9	59.4	59.5	59.8	59.5	59.1	58.3	59.8	55.1		
" 16,.....	58.4	58.1	57.9	57.6	57.4	57.3	57.2	57.9	58.4	59.5	59.8	60.0	60.4	60.2	60.0	59.9	60.1	59.8	60.3	60.3	60.1	60.1	60.4	59.2	60.6	57.2	
" 17,.....	60.8	60.7	60.8	60.8	60.5	60.8	60.6	60.7	62.2	62.0	62.1	62.0	63.4	63.0	63.9	63.7	62.0	59.7	59.5	59.9	59.7	59.7	59.8	61.1	63.9	59.2	
" 18,.....	60.1	59.2	58.7	58.7	57.5	56.3	55.2	56.8	57.7	59.5	59.8	60.1	60.7	60.7	60.2	59.8	59.8	59.2	59.6	59.7	59.4	59.2	59.5	59.0	61.1	55.1	
" 19,.....	57.8	57.4	57.4	57.7	57.5	57.5	58.2	58.6	59.7	60.6	60.8	61.4	61.6	61.7	61.3	60.2	60.2	59.7	59.7	59.4	59.8	60.1	60.3	60.5	59.6	61.8	57.3
" 20,.....	60.4	60.1	58.8	58.8	57.6	57.2	57.1	57.7	58.1	59.3	61.5	62.5	62.5	62.4	62.5	61.7	61.2	60.9	60.8	60.7	60.6	60.5	60.5	60.7	60.2	62.8	56.7
" 21,.....	61.1	61.2	61.3	61.4	61.4	61.6	61.4	61.5	61.9	62.1	62.3	61.7	61.8	61.5	61.5	61.8	61.3	61.3	61.7	61.6	61.4	61.0	61.2	61.5	62.3	60.7	
" 22,.....	61.2	61.2	61.4	61.3	61.0	60.8	60.6	60.5	60.7	61.5	61.8	62.5	62.5	62.5	62.6	63.1	62.4	62.8	62.5	63.3	63.4	63.8	63.6	62.1	63.8	60.5	
" 23,.....	63.6	63.7	60.6	59.8	60.6	60.7	60.0	60.2	61.0	63.5	65.1	64.5	64.8	65.6	63.6	63.6	63.1	62.6	61.5	61.2	60.2	59.6	59.1	58.8	62.0	66.1	58.8
" 24,.....	59.1	58.8	58.6	58.1	57.6	57.5	57.3	57.4	57.2	57.5	57.7	57.0	57.0	57.4	57.5	57.6	57.9	58.0	58.1	58.3	58.5	58.6	58.8	58.8	57.9	57.0	
" 25,.....	59.0	59.0	59.0	59.0	59.1	59.3	59.5	59.5	60.3	59.8	60.2	59.7	60.2	60.4	59.9	60.3	59.8	59.8	60.2	60.1	59.3	59.3	58.4	59.6	61.0	58.3	
" 26,.....	56.7	56.2	55.8	55.3	55.8	55.8	55.4	54.8	54.5	56.4	56.3	57.4	55.3	55.5	55.5	55.5	54.6	54.6	54.6	54.3	53.8	53.7	53.2	55.2	58.4	53.2	
" 27,.....	52.1	52.1	51.9	51.3	51.5	51.9	51.8	52.6	54.7	54.7	55.6	56.3	56.5	56.8	56.8	56.8	56.6	56.6	55.4	54.9	55.2	55.2	54.7	54.4	57.4	51.1	
" 28,.....	54.5	55.0	55.1	55.0	54.8	54.7	53.8	53.7	53.9	54.4	54.0	54.4	54.9	54.5	54.5	54.1	52.9	52.8	53.3	53.7	53.6	53.1	52.2	54.0	55.1	51.8	
" 29,.....	52.2	51.0	51.3	50.4	50.6	51.5	51.4	51.4	50.6	50.2	50.1	51.5	50.5	50.9	50.7	50.5	49.5	49.6	49.4	48.9	48.8	47.3	46.4	45.6	50.0	52.4	45.5
" 30,.....	45.8	45.0	44.3	43.9	43.7	41.9	42.7	43.0	42.9	44.5	47.3	48.9	49.8	50.5	51.5	50.4	49.4	48.8	47.6	46.8	45.9	45.3	44.7	46.4	51.5	41.8	
" 31,.....	44.5	44.1	43.4	42.8	42.5	42.5	42.5	43.1	43.8	44.5	45.9	47.5	49.4	50.1	51.5	51.9	52.0	50.4	49.4	49.1	49.1	48.6	47.8	46.5	46.8	52.0	42.2
Hourly Means,	57.8	57.5	57.1	56.8	56.8	56.6	56.5	57.1	58.1	59.3	60.1	60.6	61.0	61.3	61.1	60.7	60.0	59.1	58.7	58.7	58.6	58.4	58.1	57.7	58.7	62.1	55.5

† Approximate.

TABLE III.
TEMPERATURE OF EVAPORATION AND RADIATION, FOR THE MONTH OF JANUARY, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.	Sun.	Rad.
Jan. 1,.....	53.4	53.4	53.3	53.0	53.1	53.0	53.1	53.5	53.4	54.4	53.8	53.9	54.6	55.3	57.4	57.9	56.3	54.0	58.5	53.5	53.0	52.2	50.9	49.9	53.7	124.1	46.3
" 2,.....	48.6	*47.6	46.6	*46.6	*47.0	*47.4	*47.5	*49.0	*49.7	50.3	50.7	51.4	53.4	53.1	52.7	53.0	52.1	52.2	53.0	53.4	53.3	47.6	47.6	47.7	50.1	122.0	51.6
" 3,.....	48.9	47.8	47.1	*17.0	*46.9	*46.7	*46.6	*46.4	*46.2	46.1	47.1	47.8	47.9	48.6	48.2	50.3	49.6	50.9	50.1	50.4	50.8	51.2	50.2	48.4	48.4	124.6	46.0
" 4,.....	43.4	42.7	42.5	42.4	42.0	43.2	†42.2	†44.2	†44.6	45.6	47.2	47.6	48.4	49.2	48.8	48.2	49.5	48.7	49.5	49.3	49.7	51.1	*50.9	*50.0	46.7	122.8	46.6
" 5,.....	49.2	*48.9	*48.5	*48.2	*47.8	*47.5	*47.2	*46.9	*46.5	46.2	47.5	48.6	47.8	48.6	49.4	48.0	49.5	49.0	49.2	49.8	50.5	51.2	50.6	52.2	48.7	123.5	40.9
" 6,.....	*51.8	51.4	*51.3	*51.2	*51.0	*50.5	*50.3	*50.7	*51.2	52.4	52.9	52.7	53.6	53.7	54.1	53.7	54.3	53.6	53.9	53.9	54.3	54.7	55.5	55.5	52.8	109.9	52.3
" 7,.....	55.2	55.2	54.7	54.2	54.9	55.2	55.2	55.4	55.8	56.6	57.3	57.4	57.6	58.2	58.1	58.0	57.5	56.7	56.9	56.5	56.4	56.5	56.3	56.7	56.4	131.6	56.7
" 8,.....	56.2	55.7	55.1	54.4	54.9	54.6	55.1	56.0	56.1	57.4	57.4	55.6	56.4	56.6	55.1	54.4	54.6	54.8	56.0	56.9	57.5	57.7	57.0	56.2	55.9	127.9	56.2
" 9,.....	55.5	54.3	53.0	52.4	52.2	52.4	52.9	55.1	55.5	57.1	58.1	56.8	57.4	57.6	59.0	60.8	60.0	60.0	57.6	58.3	58.6	58.7	59.1	56.7	142.0	56.2	
" 10,.....	59.5	58.9	57.2	54.5	54.8	54.2	54.8	52.8	52.6	53.4	56.0	56.9	57.7	58.6	58.3	57.9	57.6	57.6	57.7	57.9	58.1	58.1	57.3	56.9	56.7	127.3	55.7
" 11,.....	56.3	55.3	55.3	55.2	55.0	54.6	55.3	56.7	58.1	57.4	57.4	57.4	58.4	58.2	59.4	59.4	58.7	59.5	59.1	53.9	57.2	58.5	58.0	57.8	57.2	126.8	48.7
" 12,.....	56.7	55.9	55.2	54.5	53.8	53.6	52.9	53.0	52.6	52.6	52.8	52.5	52.7	52.4	52.5	52.7	52.4	52.8	53.1	53.7	54.0	53.8	53.4	53.4	115.3	55.5	
" 13,.....	53.5	52.6	52.6	52.0	51.8	51.9	51.7	52.4	52.7	53.1	53.6	53.4	53.6	54.0	54.4	55.0	55.2	54.5	54.9	55.5	56.1	56.5	56.8	56.9	53.9	122.5	54.1
" 14,.....	57.4	57.6	57.4	57.2	57.5	57.1	56.4	57.4	51.9	52.4	52.4	52.4	53.4	53.8	52.7	52.2	51.7	49.7	50.0	49.9	49.1	48.6	50.0	48.8	53.2	125.8	52.4
" 15,.....	48.5	49.0	48.6	47.9	48.8	49.5	50.3	51.3	51.9	52.5	53.1	53.3	54.4	54.1	54.0	54.1	54.1	53.9	53.8	54.7	55.8	55.7	55.1	54.4	52.4	117.9	47.7
" 16,.....	54.5	54.3	53.5	53.3	53.3	53.5	53.0	53.9	54.5	55.3	55.8	56.4	57.3	57.1	57.1	57.4	57.4	57.6	58.1	58.5	58.6	58.6	58.6	56.0	103.3	56.9	
" 17,.....	58.9	59.1	59.1	59.1	58.8	58.8	58.3	58.7	58.9	58.4	57.4	58.0	58.2	57.7	57.2	57.3	58.0	56.6	56.1	56.1	56.2	55.9	55.9	56.5	57.7	121.9	58.5
" 18,.....	56.5	54.3	53.9	54.8	53.1	51.7	50.8	52.7	53.1	54.4	54.2	54.6	54.8	55.2	55.2	54.8	54.5	53.4	54.4	54.4	53.5	53.1	52.3	52.1	53.8	113.1	55.3
" 19,.....	52.0	51.4	51.9	52.4	53.6	52.7	53.9	54.6	54.7	55.4	55.6	56.2	56.4	56.6	55.8	55.2	55.2	55.5	55.1	55.2	56.1	56.7	56.8	57.0	54.8	125.8	56.0
" 20,.....	56.8	56.9	56.0	56.3	54.8	54.2	54.2	55.8	56.0	56.3	57.1	58.0	57.6	58.1	57.6	58.0	57.7	57.7	57.6	57.8	57.9	58.2	58.1	58.3	57.0	110.9	55.0
" 21,.....	58.4	58.6	59.3	59.5	59.6	59.9	59.8	59.7	60.0	60.3	60.3	60.4	60.5	59.9	59.6	60.1	60.2	59.7	59.8	60.5	60.5	59.9	59.6	59.7	59.8	82.3	58.7
" 22,.....	59.8	60.0	60.6	60.5	60.1	60.2	59.9	59.9	60.1	60.4	60.5	61.2	61.2	61.3	61.4	61.8	61.3	61.4	61.8	61.6	62.4	62.3	62.7	62.6	61.0	101.7	59.8
" 23,.....	62.5	62.7	59.5	58.5	59.3	58.8	57.4	56.8	57.2	58.7	58.9	57.7	57.4	57.5	57.4	57.1	55.5	56.3	55.4	55.1	54.4	54.2	54.6	53.9	57.4	130.9	57.8
" 24,.....	54.4	54.4	54.3	54.0	53.6	53.8	54.2	54.9	54.9	55.2	55.4	55.4	55.7	56.3	56.4	56.3	56.3	56.7	57.0	57.3	57.2	57.4	57.5	57.7	85.4	55.6	
" 25,.....	57.8	57.9	58.2	58.4	58.7	58.8	58.9	58.9	59.8	59.4	59.1	59.4	59.4	59.5	59.3	59.4	59.5	58.2	58.6	58.9	59.0	58.3	58.7	56.7	58.8	76.9	57.3
" 26,.....	54.6	53.8	53.1	52.1	53.1	52.6	52.8	52.6	51.5	52.5	52.3	53.4	51.3	51.5	51.3	51.4	51.1	51.0	50.8	51.0	50.6	50.9	50.1	50.1	51.9	74.4	51.4
" 27,.....	49.6	49.8	48.7	48.1	48.1	48.3	48.4	49.0	51.4	50.2	50.9	51.0	50.5	50.6	51.1	51.2	51.3	50.4	50.3	50.7	50.7	51.4	53.0	53.0	50.3	93.3	49.7
" 28,.....	52.3	52.3	51.6	51.9	51.3	51.1	51.6	51.3	51.6	51.9	52.1	52.4	52.1	52.3	51.9	52.2	52.2	51.8	51.1	51.3	51.6	51.7	51.1	50.9	51.7	89.3	51.9
" 29,.....	50.6	49.9	49.5	48.5	49.4	50.0	49.3	49.3	48.9	48.6	47.8	48.5	47.7	47.9	47.7	47.4	46.5	46.2	45.8	45.3	44.9	43.2	41.9	41.4	47.3	65.1	46.6
" 30,.....	49.6	40.0	†39.6	†39.3	*39.2	*39.0	*38.5	*38.6	*38.6	38.8	40.6	41.7	42.4	42.6	43.2	41.8	40.9	40.2	39.0	39.1	38.2	38.2	*38.1	38.0	39.8	118.9	42.6
" 31,.....	36.4	35.8	35.0	33.7	*33.6	*33.5	*33.6	*34.2	*34.7	36.1	37.1	39.3	41.8	41.3	40.3	40.4	40.5	40.4	40.3	39.9	38.4	38.5	37.8	37.2	37.5	115.8	38.3
Hourly Means,	53.2	52.8	52.3	52.0	52.0	51.8	51.8	52.3	52.4	52.9	53.3	53.6	53.9	54.1	54.0	54.0	53.9	53.5	53.6	53.5	53.7	53.6	53.4	53.1	53.1	112.0	52.2

* Interpolated.

† Approximate.

TABLE IV.

TABLE IV.
AN HOURLY AND DAILY RELATIVE HUMIDITY AND TENSION OF AQUEOUS VAPOUR
FOR THE MONTH OF JANUARY, 1886.

Hour.	Hourly Mean.		Date.	Daily Mean.	
	Humidity.	Tension.		Humidity.	Tension.
			1886.		
1 a	72	0.352	Jan. 1,.....	61	0.324
2 "	71	0.344	" 2,.....	53	0.257
3 "	70	0.336	" 3,.....	40	0.203
4 "	70	0.332	" 4,.....	36	0.173
5 "	70	0.332	" 5,.....	49	0.232
6 "	70	0.329	" 6,.....	65	0.321
7 "	71	0.330	" 7,.....	64	0.372
8 "	70	0.336	" 8,.....	58	0.342
9 "	66	0.326	" 9,.....	52	0.334
10 "	62	0.323	" 10,.....	63	0.369
11 "	61	0.324	" 11,.....	64	0.380
Noon.	60	0.326	" 12,.....	69	0.341
1 p	60	0.329	" 13,.....	69	0.347
2 "	59	0.331	" 14,.....	55	0.301
3 "	60	0.381	" 15,.....	64	0.317
4 "	62	0.336	" 16,.....	81	0.408
5 "	65	0.342	" 17,.....	80	0.433
6 "	67	0.343	" 18,.....	69	0.347
7 "	70	0.352	" 19,.....	72	0.367
8 "	69	0.349	" 20,.....	81	0.424
9 "	70	0.356	" 21,.....	90	0.493
10 "	71	0.355	" 22,.....	94	0.524
11 "	71	0.354	" 23,.....	74	0.412
Midt.	72	0.350	" 24,.....	86	0.416
			" 25,.....	95	0.486
			" 26,.....	79	0.344
			" 27,.....	74	0.312
			" 28,.....	85	0.355
			" 29,.....	81	0.292
			" 30,.....	51	0.160
			" 31,.....	31	0.104
Mean,	67	0.338	Mean,.....	67	0.338

TABLE V.
DURATION OF SUNSHINE.

TABLE VI.
RAINFALL FOR THE MONTH OF JANUARY, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Sums.
Jan. 1,
" 2,
" 3,
" 4,
" 5,
" 6,
" 7,
" 8,
" 9,
" 10,
" 11,
" 12,
" 13,
" 14,	0·010	0·010	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·020
" 15,
" 16,
" 17,
" 18,
" 19,
" 20,	0·020	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·025
" 21,
" 22,	0·050	0·030	0·020	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·100
" 23,	0·050	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·050
" 24,
" 25,	0·005	...	...	...	0·015	0·035	0·005	...	...	...	...	0·050	0·150	0·020	...	...	...	...	0·005	...	...	0·285
" 26,	0·015	...	...	0·005	0·005	0·025
" 27,
" 28,	0·030	...	0·005	0·050	0·160	0·050	...	...	0·005	0·155	...	...	...	0·025	0·165	0·070	...	0·715
" 29,	0·170	0·210	0·070	0·055	0·035	...	...	0·015	...	0·160	0·025	0·025	...	...	0·005	...	0·005	...	...	...	...	...	...	...	0·775
" 30,	0·020	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·020
" 31,
Sums,.....	0·170	0·260	0·080	0·070	0·035	0·070	0·095	0·075	0·010	0·210	0·185	0·075	0·000	0·050	0·155	0·025	0·155	0·005	0·000	0·015	0·000	0·025	0·175	0·075	2·015

TABLE VII.

DIRECTION AND VELOCITY OF THE WIND, FOR THE MONTH OF JANUARY, 1886.

TABLE VIII.
MEAN HOURLY COMPONENTS AND MEAN DIRECTION OF THE WIND, FOR JANUARY, 1886.

Hour.	Components (miles per hour).						Direction.
	N	E	S	W	+ N-S	+ E-W	
1 a.	3.6	10.0	0.4	0.5	+ 3.2	+ 9.5	E 19° N
2 "	4.4	9.4	0.4	0.5	4.0	8.8	E 25° N
3 "	4.8	9.1	0.5	0.9	4.3	8.2	E 28° N
4 "	4.7	9.3	0.5	0.6	4.2	8.6	E 26° N
5 "	5.0	8.7	0.2	0.4	4.8	8.4	E 30° N
6 "	4.7	8.7	0.2	0.3	4.5	8.4	E 28° N
7 "	4.5	8.6	0.0	0.2	4.5	8.4	E 28° N
8 "	4.7	8.9	0.1	0.1	4.5	8.8	E 27° N
9 "	5.4	9.1	0.0	0.3	5.4	8.8	E 32° N
10 "	4.3	10.5	0.4	0.4	3.9	10.1	E 21° N
11 "	5.2	10.0	0.3	1.0	4.9	9.0	E 29° N
Noon.	4.6	10.2	0.8	1.1	3.8	9.1	E 23° N
1 p.	3.8	10.6	0.5	1.2	3.3	9.4	E 20° N
2 "	3.6	10.3	1.3	1.0	2.3	9.4	E 14° N
3 "	2.8	10.6	0.8	1.5	2.0	9.1	E 13° N
4 "	3.2	10.4	0.8	1.0	2.4	9.4	E 14° N
5 "	3.4	9.5	0.0	0.7	3.4	8.8	E 21° N
6 "	3.5	8.4	0.1	1.2	3.4	7.2	E 25° N
7 "	3.5	8.6	0.1	0.5	3.5	8.1	E 24° N
8 "	3.5	9.5	0.3	0.2	3.2	9.3	E 19° N
9 "	4.3	9.9	0.1	0.2	4.2	9.7	E 24° N
10 "	5.5	9.9	0.1	0.2	5.4	9.7	E 29° N
11 "	5.6	9.5	0.0	0.2	5.6	9.3	E 31° N
Midt.	4.3	9.5	0.4	0.4	+ 3.9	+ 9.2	E 23° N
Mean,.....	4.3	9.5	0.3	0.6	+ 3.9	+ 8.9	E 24° N

TABLE IX.

DIRECTION AND FORCE OF THE WIND AT VICTORIA PEAK, AND SEA DISTURBANCE.

DATE.	4 a.			10 a.			4 p.			10 p.		
	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.	Sea.
1886.												
Jan.	1,.....	...	...	1	NE	3	2	NW	5	2	N	5
"	2,.....	...	...	2	NE	4	1	N	2	2	N	4
"	3,.....	...	...	2	N	5	2	N	4	1	ENE	3
"	4,.....	...	...	2	NE	3	2	NE	3	1	N	4
"	5,.....	...	...	2	E	4	3	E	5	3	E	4
"	6,.....	...	...	4	E	4	5	E	5	3	E	5
"	7,.....	...	...	3	E	5	3	E	5	1	EE	4
"	8,.....	...	...	2	E	5	2	E	5	2	E	5
"	9,.....	...	...	1	NE	4	2	NNE	4	1	N	3
"	10,.....	...	...	2	E	4	2	E	3	1	E	3
"	11,.....	...	...	0	NE	4	1	NE	4	0	NE	5
"	12,.....	...	...	4	E	5	5	E	5	4	E	5
"	13,.....	...	...	4	E	4	4	E	4	3	E	5
"	14,.....	...	...	2	N	5	3	NE	4	2	ENE	4
"	15,.....	...	...	3	E	5	5	E	6	5	E	6
"	16,.....	...	...	4	E	6	5	E	5	5	E	5
"	17,.....	...	...	2	E	5	2	NE	4	2	N	4
"	18,.....	...	...	2	E	4	1	E	3	1	N	4
"	19,.....	...	...	1	E	4	2	E	4	2	NE	4
"	20,.....	...	...	1	NE	4	1	E	4	1	SE	5
"	21,.....	...	...	1	E	6	1	ESE	5	2	SE	6
"	22,.....	...	...	2	S	6	2	S	5	1	S	6
"	23,.....	...	...	0	N	3	1	N	3	1	E	3
"	24,.....	...	...	5	E	6	5	E	6	5	E	6
"	25,.....	...	...	3	SE	5	* 3	S	3	* 2	N	4
"	26,.....	...	...	2	ENE	4	2	ENE	5	2	E	4
"	27,.....	...	...	2	N	4	2	ENE	4	2	ENE	6
"	28,.....	...	...	5	E	6	4	E	5	4	E	5
"	29,.....	...	...	2	NE	5	2	N	5	3	NNE	6
"	30,.....	...	...	2	NNE	6	3	N	5	2	N	6
"	31,.....	...	...	3	NNE	6	2	NE	5	2	N	5
Mean,.....	...	...	2.3	E 20° N	4.6	2.6	E 20° N	4.4	2.1	E 28° N	4.7	2.5

* Interpolated.

TABLE X.
VICTORIA PEAK.

DATE.	BAROMETER.			TEMPERATURE.						
	10 a.	.4 p.	10 p.	10 a.	4 p.	10 p.	Sun.	Max.	Min.	Rad.
1886.	ins.	ins.	ins.	°	°	°	°	°	°	°
1,.....	28.414	28.314	28.346	52.4	55.4	50.0	118.8	55.6	49.8	43.5
2,.....	.399	.337	.392	52.6	54.8	51.2	118.2	55.2	49.9	44.7
3,.....	.439	.394	.384	51.4	54.8	53.8	119.4	54.8	49.0	46.6
4,.....	.493	.441	.445	50.6	54.8	52.4	121.4	54.8	48.0	45.5
5,.....	.452	.379	.372	51.8	52.8	50.6	118.2	53.2	48.0	45.5
6,.....	.376	.290	.312	51.4	52.8	51.0	119.6	52.8	49.0	42.7
7,.....	.392	.315	.327	53.8	57.8	51.8	124.0	57.8	51.0	41.7
8,.....	.393	.335	.325	56.8	58.8	56.2	126.0	58.8	51.8	52.5
9,.....	.422	.343	.349	58.0	59.4	57.8	142.0	59.8	54.0	52.5
10,.....	.360	.268	.269	58.6	60.8	59.6	125.0	60.8	56.0	53.5
11,.....	.331	.248	.259	59.8	60.8	58.8	124.0	60.8	54.0	54.5
12,.....	.380	.322	.334	55.6	54.8	53.2	115.0	58.8	53.0	51.5
13,.....	.332	.230	.221	53.4	54.8	53.4	120.0	55.2	51.0	50.5
14,.....	.343	.243	.197	54.0	55.8	52.8	118.0	55.8	50.0	41.5
15,.....	.353	.259	.256	54.2	52.8	50.8	114.6	54.3	50.0	41.5
16,.....	.288	.215	.191	52.6	53.8	53.0	97.2	55.1	51.0	49.5
17,.....	.346	.354	.240	55.2	56.0	54.2	108.0	57.2	53.0	52.5
18,.....	.350	.247	.241	54.8	55.6	53.0	107.0	55.8	53.0	50.5
19,.....	.239	.150	.163	54.6	55.2	54.2	110.0	55.8	53.0	48.5
20,.....	.195	.099	.118	54.6	55.8	56.6	99.0	56.6	52.8	52.5
21,.....	.124	.035	.021	57.0	57.8	59.2	80.6	59.2	56.6	55.7
22,.....	.079	27.975	.000	60.0	60.8	55.8	93.8	61.8	52.4	52.9
23,.....	.027	28.040	.025	59.2	59.8	58.0	124.0	61.7	56.0	53.5
24,.....	.079	27.969	27.957	53.8	53.8	53.8	90.0	58.0	51.8	49.5
25,.....	.052	27.981	28.057	60.8	58.2	55.8	85.8	60.8	50.0	48.5
26,.....	.144	28.081	.106	54.6	53.8	51.4	73.8	55.8	51.4	43.5
27,.....	.183	.118	.158	51.4	51.6	50.8	86.2	51.8	50.0	46.5
28,.....	.170	.033	.173	49.8	49.8	47.8	75.0	50.8	47.8	44.5
29,.....	.184	.138	.219	48.8	47.8	41.8	63.2	49.7	40.0	31.5
30,.....	.311	.274	.342	40.8	43.6	39.8	111.0	43.8	39.0	31.5
31,.....	.375	.278	.274	38.0	41.6	40.6	108.0	41.8	36.0	35.5
Mean,.....	28.291	28.216	28.228	53.6	54.7	52.6	107.6	55.6	50.3	46.9

TABLE XI.
HUMIDITY AT THE OBSERVATORY AND AT VICTORIA PEAK.

DATE.	RELATIVE HUMIDITY.						TENSION OF AQUEOUS VAPOUR.					
	OBSERVATORY.			VICTORIA PEAK.			OBSERVATORY.			VICTORIA PEAK.		
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.
1886.	63	61	49	89	83	77	0.341	0.381	0.269	0.350	0.366	0.278
1,.....	47	50	36	80	81	70	.244	.282	.178	.317	.347	.264
2,.....	26	31	61	64	75	68	.133	.185	.292	.240	.321	.282
3,.....	30	24	62	73	69	57	.141	.141	.295	.272	.300	.225
4,.....	29	39	57	67	62	67	.147	.194	.283	.262	.250	.248
5,.....	61	58	67	82	87	85	.309	.313	.352	.312	.346	.317
6,.....	59	63	68	87	82	87	.358	.390	.383	.359	.391	.332
7,.....	53	39	72	82	71	73	.350	.260	.410	.376	.357	.330
8,.....	39	58	69	71	71	76	.290	.387	.418	.339	.360	.363
9,.....	45	65	77	69	81	77	.296	.394	.432	.343	.434	.397
10,.....	62	52	76	72	72	71	.378	.375	.437	.366	.388	.351
11,.....	65	64	73	83	83	84	.320	.318	.360	.369	.357	.340
12,.....	62	67	75	84	87	85	.321	.359	.403	.343	.373	.348
13,.....	48	37	45	79	76	80	.271	.225	.217	.330	.335	.322
14,.....	62	70	77	78	80	86	.313	.355	.395	.328	.320	.324
15,.....	73	83	91	93	99	78	.383	.431	.474	.369	.413	.317
16,.....	80	65	77	97	90	97	.441	.386	.398	.424	.402	.408
17,.....	70	71	65	87	88	91	.358	.365	.324	.373	.391	.369
18,.....	70	71	79	90	91	79	.372	.371	.417	.386	.395	.333
19,.....	82	79	86	94	92	.415	.435	.456	.403	.421	.423	
20,.....	90	91	91	98	99	97	.501	.502	.497	.458	.478	.490
21,.....	94	93	94	99	99	99	.510	.536	.549	.516	.531	.444
22,.....	74	65	68	97	94	86	.432	.382	.350	.490	.482	.417
23,.....	85	92	93	99	99	99	.407	.438	.457	.413	.413	.418
24,.....	97	94	94	99	98	94	.503	.497	.475	.531	.478	.421
25,.....	75	74	81	94	91	89	.344	.327	.337	.403	.380	.337
26,.....	71	66	75	90	87	86	.305	.304	.331	.342	.334	.319
27,.....	84	85	87	93	93	93	.355	.362	.360	.331	.331	.306
28,.....	90	79	69	88	93	84	.323	.287	.227	.304	.310	.220
29,.....	55	42	42	75	83	72	.163	.154	.131	.189	.237	.176
30,.....	34	26	29	66	68	59	.104	.102	.102	.154	.179	.150
Mean,.....	64	63	70	84	85	82	0.327	0.337	0.355	0.355	0.368	0.331

TABLE XII.

AMOUNT AND CLASSIFICATION OF CLOUDS AND DIRECTION WHENCE COMING.

DATE.	1 a.			4 a.			7 a.			10 a.		
	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction
1886.												
Jan. 1,	1	cum.	E	1	sm-cum.	E	0	...	...	0	...	...
" 2,	0	...	...	1	cum.	...	0	...	...	0	...	...
" 3,	0	...	...	0	...	...	0	...	...	0	...	...
" 4,	0	...	...	0	...	...	0	...	...	0	...	...
" 5,	0	...	...	0	...	...	0	...	...	0	...	...
" 6,	1	cum.	E	6	cum.	E	1	e-cum.	...	10	sm-cum.	SSE
" 7,	10	cum.	...	10	cum.	SW	10	cum.	S	10	cum.	S
" 8,	2	e-str.	...	4	cum.	E	1	e-cum.	WSW	2	e-cum.	SW
" 9,	7	esstr.	...	5	cum.	SW	9	sm-cum.	W	9	sm-cum.	W
" 10,	6	cum.	...	8	cum.	SW	10	sm-cum.	SSW	7	sm-cum.	S
" 11,	4	cum.	...	1	cum.	...	3	e-cum.	SW	1	e-str.	WSW
" 12,	5	cum.	...	8	cum.	E	9	cum.	E	10	cum-nim.	E
" 13,	1	cum.	...	6	cum.	E	1	e-str.	...	0	...	...
" 14,	10	nim.	...	9	cum-nim.	E	8	cum.	E	2	e-str.	W
" 15,	1	e-str.	...	4	cum.	...	4	e-str.	W	4	e-str.	W
" 16,	10	cum-nim.	E	9	cum-nim.	E	10	cum-nim.	E	10	cum-nim.	E
" 17,	10	cum-nim.	E	10	nim.	E	10	cum-nim.	E	10	...	...
" 18,	10	cum.	...	10	nim.	E	10	cum.	E	9	cum.	ES
" 19,	10	cum.	W	10	cum.	...	10	str.	...	8	...	W
" 20,	10	cum.	...	10	R-cum.	...	10	cum-nim.	SW	10	cum-nim.	W
" 21,	10	cum.	WSW	10	cum-nim.	E	10	cum-nim.	ESE	10	nim.	ES
" 22,	10	nim.	...	10	nim.	...	10	cum-nim.	S	10	...	SS
" 23,	10	nim.	SSE	9	nim.	...	10	cum-nim.	S	6	cum.	W
" 24,	10	cum.	E	10	nim.	E	10	cum-nim.	E	10	nim.	EN
" 25,	10	nim.	...	10	cum-nim.	...	10	nim.	...	10	cum-nim.	...
" 26,	10	cum-nim.	...	9	nim.	...	10	cum-nim.	E	10	...	EN
" 27,	10	cum-nim.	...	10	R-cum.	E	10	cum-nim.	E	10	...	EN
" 28,	10	cum-nim.	...	10	nim.	E	10	nim.	E	10	nim.	EN
" 29,	10	nim.	...	10	nim.	...	10	cum-nim.	...	10	nim.	V
" 30,	9	cum.	...	10	nim.	...	10	cum-nim.	...	8	sm-cum.	V
" 31,	1	cum.	...	1	cum.	NE	10	cum.	WNW	9	sm-cum.	N
Mean,.....	6.4	...	...	6.8	...	...	7.0	...	...	6.6	...	...

TABLE XII,—*Continued.*

AMOUNT AND CLASSIFICATION OF CLOUDS AND DIRECTION WHENCE COMING.

DATE.	1 p.			4 p.			7 p.			10 p.			Daily and Monthly Means.
	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	
1886.													
1,.....	0	...	...	0	...	...	0	...	...	0	...	...	0.2
2,.....	0	...	...	0	...	...	0	...	...	0	...	...	0.1
3,.....	0	...	...	0	...	...	0	...	...	0	...	...	0.0
4,.....	0	...	...	0	...	...	0	...	...	0	...	...	0.0
5,.....	0	...	...	0	...	...	0	...	...	0	...	...	0.0
6,.....	10	cum-str.	S	10	sm-cum.	S	9	cum.	S	10	cum.	SSW	7.1
7,.....	7	e-str. sm-cum.	W SSW	9	e-str.	WSW	1	e-str.	WSW	2	e-str.	WSW	7.4
8,.....	6	e-str. e-cum.	WSW SW	5	e-str.	WSW	2	e-str.	...	2	e-str.	...	3.0
9,.....	9	sm-cum.	WSW	7	e-cum. sm-cum.	WSW WSW	8	sm-cum.	WSW	5	sm-cum.	SW	7.4
10,.....	8	sm-cum.	SSW	10	sm-cum.	SSW	10	sm-cum.	SSW	4	cum.	...	7.9
11,.....	2	e-str.	WSW	0	...	...	0	...	...	1	cum.	E	1.5
12,.....	6	cum.	E	2	cum.	E	0	...	...	1	cum.	E	5.1
13,.....	2	sm-cum.	SW	2	e-cum. cum.	WSW E	10	sm-cum.	SW	10	R-cum.	WSW	4.0
14,.....	2	e-cum.	W	2	e-cum.	W	2	e-str.	W	7	e-str.	W	5.3
15,.....	10	cum-nim.	E	10	cum. cum-nim.	ESE	10	cum-nim.	E	10	cum-nim.	E	6.6
16,.....	10	cum-nim.	E	10	cum-nim.	E	10	eu m-nim.	ESE	10	cum-nim.	ESE	9.9
17,.....	10	cum. cum-nim.	S E	10	cum.	ESE	10	cum.	NE	10	cum.	NE	10.0
18,.....	10	cum.	W	10	cum. cum-nim.	W NNE	10	cum.	W	10	cum.	W	9.9
19,.....	10	cum. R-cum.	W SSE	10	cum-nim.	...	10	R-cum.	W	10	cum-nim.	S	9.7
20,.....	10	R-cum.	W	10	cum-nim.	S	10	cum.	SW	10	nim.	WSW	10.0
21,.....	10	nim.	SE	10	nim.	SE	10	nim.	...	10	nim.	...	10.0
22,.....	10	cum-nim.	SSW	10	R-cum. cum-nim.	SW SSE	10	cum-nim.	SW	10	cum-nim.	SW	10.0
23,.....	1	sm-cum.	W	10	cum-str.	W	10	str.	...	10	cum-nim.	E	8.2
24,.....	10	nim.	ENE	10	nim.	ENE	10	nim.	...	10	nim.	...	10.0
25,.....	10	nim.	...	10	nim.	...	10	cum-nim.	...	10	nim.	...	10.0
26,.....	10	str. cum-nim.	ENE	10	str. cum-nim.	E	10	str.	...	10	nim.	...	9.9
27,.....	10	str.	...	10	str. R-cum.	N	10	cum.	...	10	cum-nim.	E	10.0
28,.....	10	cum. cum-nim.	ENE E	10	nim.	E	10	nim.	...	10	nim.	...	10.0
29,.....	10	str. nim.	W	10	str. cum-nim.	WNW	10	cum-nim.	WNW	9	cum.	WNW	9.9
30,.....	2	sm-cum.	W	0	...	...	0	...	...	0	...	...	4.9
31,.....	2	sm-cum.	NW	0	...	...	0	...	...	5	cum.	NW	3.5
Mean, ...	6.4	...	...	6.4	...	...	6.2	...	...	6.3	...	...	6.5

TABLE XIII.
RAINFALL AT DIFFERENT STATIONS.

DATE.	OBSERVATORY.		STONE CUTTERS' ISLAND.	VICTORIA PEAK
	Amount.	Duration.	Amount.	Amount.
1886.	ins.	hrs.	ins.	ins.
Jan. 1,.....	...	...	...	...
" 2,.....	...	...	...	...
" 3,.....	...	...	...	...
" 4,.....	...	...	...	...
" 5,.....	...	...	...	...
" 6,.....	...	...	...	...
" 7,.....	...	...	...	...
" 8,.....	...	...	...	...
" 9,.....	...	...	...	...
" 10,.....	...	...	...	...
" 11,.....	...	...	...	...
" 12,.....	...	...	...	...
" 13,.....	0.020	5	0.05	...
" 14,.....	...	...	...	...
" 15,.....	...	...	...	...
" 16,.....	...	...	...	...
" 17,.....	...	...	...	...
" 18,.....	...	...	...	...
" 19,.....	0.025	2	...	...
" 20,.....	...	4	...	...
" 21,.....	0.100	20	0.10	0.26
" 22,.....	0.050	3	...	0.28
" 23,.....	...	3	...	0.09
" 24,.....	0.060	20	0.05	0.28
" 25,.....	0.225	5	0.10	0.20
" 26,.....	0.025	3	0.03	...
" 27,.....	0.070	4	0.08	...
" 28,.....	1.360	18	1.50	1.56
" 29,.....	0.080	6	0.14	...
" 30,.....	...	...	...	...
" 31,.....	...	...	...	...
Total,.....	2.015	93	2.05	2.67

W. DOBERCK,
Government Astronomer

Hongkong Observatory, 10th May, 1886.

HONGKONG OBSERVATORY.

Weather Report for February, 1886.

In the *China Coast Meteorological Register*, based on information transmitted by the Great Northern and the Eastern Extension Telegraph Companies, which was daily published, is given a summary of the atmospheric circumstances in Luzon and along the Coast of China. It also contains information concerning the weather in Nagasaki and Vladivostock.

Unusual visibility was noted on the 1st and the 6th.

Fog occurred on the mornings of the 24th, the 25th and the 26th.

During the night between the 3rd and the 4th it blew a whole gale in gusts. The barometer had been falling since the 30th of the previous month.

The total distance traversed by, as well as the duration and average velocity of winds from different quarters were as follows:—

Direction.	Total Distance. Miles.	Duration. Hours.	Velocity.
			Miles per hour.
N	1151	123	9.4
NE	1737	110	15.8
E	7577	344	22.0
SE	77	9	8.6
S	5	1	5.0
SW	38	5	7.6
W	375	45	8.3
NW	128	20	6.4
Calm	9	15	0.6

TABLE I.

BAROMETRIC PRESSURE FOR THE MONTH OF FEBRUARY, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.	
Feb. 1, ...	30.144	30.133	30.126	30.129	30.126	30.135	30.159	30.173	30.190	30.189	30.176	30.145	30.101	30.067	30.044	30.031	30.036	30.046	30.057	30.076	30.083	30.079	30.078	30.066	30.108	
" 2, ...	.057	.052	.061	.061	.067	.065	.084	.100	.117	.126	.112	.091	.058	.036	.021	.020	.025	.023	.025	.042	.049	.052	.053	.052	.060
" 3, ...	.036	.028	.024	.023	.016	.024	.055	.086	.103	.106	.112	.077	.037	.026	.012	.29.994	.002	.008	.012	.022	.030	.029	.033	.017	.038
" 4, ...	.019	29.991	29.987	29.971	29.978	29.997	.013	.029	* .036	.038	.029	.018	29.982	29.945	29.921	.924	29.981	29.948	29.951	29.983	29.991	29.987	29.964	29.980	29.984
" 5, ...	29.973	.950	* .937	* .924	* .916	* .912	* 29.913	* 29.920	* 29.926	29.924	29.889	29.879	.850	.828	.815	.801	.780	.797	.801	.830	.839	.843	.839	.828	.871	
" 6, ...	.820	.804	.792	.772	.799	.841	.874	.896	.925	.944	.921	.907	.873	.869	.855	.860	.877	.913	.939	.978	30.016	30.049	30.068	30.077	.903
" 7, ...	30.092	30.092	30.106	30.104	30.106	30.118	30.140	30.155	30.172	30.174	30.165	30.158	30.139	30.124	30.115	30.108	30.111	30.121	30.146	30.170	.191	.200	.192	.191	30.141	
" 8, ...	.180	.174	.162	.156	.169	.191	.214	.223	.235	.234	.224	.203	.168	.143	.125	.111	.114	.118	.131	.157	.164	.169	.165	.154	.170
" 9, ...	.146	.118	.118	.119	.108	.113	.114	.116	.126	.122	.102	.073	.020	29.985	29.969	29.962	29.967	29.967	29.978	29.989	29.983	29.985	29.987	29.980	.048
" 10, ...	29.961	29.961	29.946	29.934	* 29.934	* 29.939	* 29.947	* 29.953	* 29.960	29.961	29.946	29.920	29.888	.864	.857	.859	.878	.878	* .905	* .930	* .950	.963	.970	.963	29.928	
" 11, ...	.975	.963	.964	.961	.969	.999	30.020	30.034	30.064	30.073	30.075	30.059	30.033	30.022	30.020	30.029	30.039	30.058	30.077	30.101	30.118	30.130	30.127	30.130	30.043
" 12, ...	30.136	30.135	30.133	30.134	30.134	30.144	.165	.176	.175	.175	.158	.120	.103	.080	.080	.084	.096	.110	.128	.129	.132	.136	.136	.132		
" 13, ...	.139	.127	.111	.107	.110	.124	.126	.137	.144	.144	.140	.118	.080	.059	.033	.036	.053	.066	.086	.112	.125	.136	.136	.136	.108
" 14, ...	.129	.109	.099	.090	.083	.070	.093	.115	.111	.110	.078	.059	.028	.012	29.967	29.967	29.957	29.968	29.987	29.998	* .000	.002	.003	.011	.044
" 15, ...	.006	29.970	29.938	29.960	29.965	29.988	29.996	.032	.027	.029	.019	29.989	29.953	29.936	.918	.916	.916	.926	.944	.968	29.977	29.985	29.999	29.997	29.974
" 16, ...	29.994	.998	.998	.979	.954	.986	30.012	.037	.071	.088	30.063	30.045	30.016	30.004	.984	30.019	30.040	30.068	30.096	30.118	30.138	30.144	30.151	30.045		
" 17, ...	30.158	30.159	30.147	30.124	30.130	30.131	.162	.186	.217	.217	.218	.191	.156	.114	.091	30.093	.112	.125	.136	.161	.181	.187	.183	.176	.156	
" 18, ...	.154	.155	.129	.129	.129	.183	.155	.169	.193	.207	.202	.170	.137	.109	.093	.075	.082	.091	.106	.138	.159	.167	.170	.167	.142
" 19, ...	.155	.151	.149	.147	.164	.187	.224	.251	.262	.272	.256	.235	.189	.163	.146	.136	.145	.169	.174	.203	.216	.228	.232	.228	.195
" 20, ...	.213	.201	.190	.186	.182	.196	.217	.233	.245	.247	.236	.207	.175	.134	.122	.109	.110	.117	.134	.164	.184	.201	.209	.211	.184
" 21, ...	.201	.179	.152	.148	.148	.154	.173	.191	.206	.206	.200	.173	.140	.109	.083	.073	.088	.102	.120	.144	.160	.175	.187	.185	.154
" 22, ...	.171	.163	.154	.149	.151	.173	.189	.205	.225	.236	.223	.198	.169	.143	.137	.130	.133	.140	.162	.180	.203	.215	.214	.178	
" 23, ...	.198	.193	.183	.173	.172	.182	.204	.223	.242	.251	.237	.208	.182	.137	.114	.106	.109	.110	.109	.119	.140	.143	.151	.146	.168
" 24, ...	.132	.125	.115	.112	.113	.115	.135	.148	.153	.159	.147	.113	.067	.037	.017	.008	.002	.010	.026	.045	.057	.054	.046	.025	.082
" 25, ...	.006	.003	29.998	.008	.017	.027	.038	.055	.073	.076	.070	.040	29.996	.29.962	29.949	29.934	29.945	29.955	29.958	29.974	29.989	29.995	.001	29.985	.002
" 26, ...	29.978	29.978	.973	29.970	29.979	29.979	29.993	29.995	.007	.016	.011	29.984	.929	.900	.903	.917	.947	.985	.981	30.017	30.019	.991	.017	30.032	29.979	
" 27, ...	30.031	30.029	30.027	30.010	30.018	30.046	30.077	30.123	.136	.137	.119	30.104	30.068	30.032	30.013	30.009	30.017	30.023	30.035	.043	.056	30.068	.067	.057	30.056	
" 28,046	.009	.013	.014	.011	.017	.024	.045	.048	.064	.055	.050	.018	29.984	29.963	29.958	29.953	29.955	29.968	29.968	29.986	.001	.004	.001	.006	30.068
Hourly } Means, }	30.080	30.070	30.063	30.057	30.059	30.071	30.090	30.107	30.121	30.126	30.115	30.092	30.057	30.031	30.014	30.008	30.015	30.027	30.040	30.062	30.075	30.082	30.085	30.082	30.068	

* Interpolated.

TABLE II.

TEMPERATURE FOR THE MONTH OF FEBRUARY, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.	Max.	Min.	
Feb. 1,.....	45.5	45.3	45.0	44.5	44.2	43.9	43.8	44.5	46.1	48.6	50.4	50.5	50.7	51.0	50.5	50.0	50.0	49.4	49.4	49.4	49.9	50.4	51.0	51.4	48.1	51.4	43.7	
" 2,.....	51.2	51.1	50.7	50.1	49.9	49.7	49.9	50.1	50.7	51.5	52.4	52.5	53.2	52.9	52.6	52.4	52.5	52.1	52.1	52.4	52.9	52.5	52.4	52.4	51.7	53.3	49.7	
" 3,.....	52.1	52.1	52.0	51.6	51.6	51.5	51.0	51.2	52.0	52.4	51.5	51.3	51.6	51.8	51.8	52.2	52.5	52.4	52.2	52.1	51.9	51.1	51.0	51.0	51.7	52.7	51.0	
" 4,.....	51.4	51.4	51.6	51.6	51.3	50.9	*50.7	*50.6	*50.8	*51.0	*51.2	51.2	52.3	52.0	52.4	52.4	52.8	52.8	53.0	53.4	53.8	54.0	54.2	54.2	54.2	54.2	*50.6	
" 5,.....	54.2	54.2	54.3	54.5	54.7	54.9	55.2	55.6	56.0	56.3	56.8	57.0	56.7	57.2	57.7	58.3	58.7	58.7	58.8	59.4	59.9	60.1	60.6	60.9	57.1	60.9	54.1	
" 6,.....	61.1	62.2	61.2	61.3	*60.2	*59.3	*58.6	*57.9	*57.6	57.3	58.6	61.5	61.8	61.9	61.5	60.4	59.1	57.6	56.9	54.8	53.2	51.8	51.5	50.3	58.2	62.5	50.3	
" 7,.....	49.7	48.7	49.0	48.1	47.3	47.3	47.6	48.1	48.9	49.7	50.5	50.6	51.2	51.3	51.4	51.4	51.4	51.2	*51.0	*50.8	*50.7	50.5	50.5	50.5	49.9	51.4	46.8	
" 8,.....	49.7	48.9	48.8	48.2	47.2	46.5	46.4	47.0	48.7	50.4	50.3	51.5	52.0	52.0	52.0	52.0	52.0	50.2	50.2	50.5	51.0	51.8	52.1	52.2	50.1	52.3	46.3	
" 9,.....	51.9	51.8	51.7	51.6	51.3	51.2	51.5	51.8	51.9	52.7	52.7	53.0	53.8	53.2	52.6	53.2	52.7	52.5	52.8	53.5	54.1	54.6	54.8	54.6	52.7	54.8	51.1	
" 10,.....	54.5	54.3	54.4	54.2	54.4	53.9	53.8	53.9	54.4	54.0	54.5	54.3	54.4	53.7	*54.0	54.4	54.7	54.9	55.0	54.1	54.5	54.0	53.8	54.3	54.3	55.0	53.7	
" 11,.....	54.5	54.3	53.6	53.6	53.4	53.4	53.4	53.9	54.2	54.6	54.0	54.3	53.5	53.6	52.6	51.0	49.9	49.2	49.8	49.5	49.4	49.5	49.6	49.2	52.2	54.8	49.2	
" 12,.....	49.1	48.6	48.6	48.6	48.7	48.6	48.8	50.0	51.6	52.6	52.5	52.6	53.9	53.1	52.9	53.3	52.7	52.0	52.3	52.8	53.1	53.3	53.4	53.2	51.5	54.0	48.5	
" 13,.....	53.2	53.1	52.8	52.7	52.2	52.2	52.0	52.8	53.6	54.4	55.2	55.5	55.5	56.5	56.2	55.9	55.4	55.0	53.9	53.7	53.6	53.6	53.7	53.7	54.0	56.5	52.0	
" 14,.....	53.2	53.0	52.9	53.0	52.7	52.7	52.7	53.2	54.0	55.3	55.4	55.9	55.5	55.4	55.3	55.5	55.5	55.2	54.8	54.8	55.2	55.6	55.1	54.8	54.9	54.4	55.9	52.6
" 15,.....	54.8	54.3	54.0	53.8	53.7	54.3	54.5	54.9	55.9	57.5	57.5	57.8	57.5	57.6	57.6	57.4	57.6	57.4	57.2	57.5	58.0	58.3	57.7	57.4	56.4	58.3	53.5	
" 16,.....	57.7	57.9	57.4	57.2	56.8	56.2	55.5	55.7	55.7	55.6	55.7	56.4	55.6	55.8	55.6	55.7	54.4	54.0	53.8	52.4	52.3	51.9	51.3	51.1	55.1	57.9	51.1	
" 17,.....	49.6	49.2	48.5	49.3	48.1	48.9	49.4	49.3	50.0	50.5	51.1	51.7	51.4	51.7	51.3	50.9	50.7	49.3	49.0	49.0	49.0	49.0	49.0	49.0	49.8	51.7	47.6	
" 18,.....	49.3	50.2	50.4	50.4	50.3	50.5	50.8	51.0	51.2	51.4	51.1	51.5	51.6	52.0	52.5	52.9	52.8	52.4	52.5	52.4	52.3	52.6	52.7	52.8	51.6	53.0	49.1	
" 19,.....	52.3	52.5	52.7	53.0	53.0	53.5	53.1	53.8	55.2	56.0	56.5	56.8	55.7	56.3	56.5	56.2	55.5	53.5	53.2	53.0	52.9	52.7	52.4	52.2	54.1	56.5	52.2	
" 20,.....	52.4	52.4	52.2	52.2	52.2	52.6	52.6	53.2	54.0	55.1	56.4	58.1	59.5	58.5	59.1	58.7	58.3	56.8	56.1	55.8	56.0	55.2	54.3	53.3	53.2	55.2	59.6	52.1
" 21,.....	52.8	52.7	52.9	52.9	52.9	52.2	52.1	51.8	52.4	54.5	54.2	54.6	55.5	54.5	54.6	54.4	55.4	53.9	52.4	51.6	51.4	51.2	50.5	50.1	50.6	52.8	55.6	50.1
" 22,.....	49.6	50.0	48.9	48.8	48.7	48.9	48.3	50.5	51.7	52.5	54.8	54.5	55.7	56.0	54.8	54.5	52.5	51.4	51.5	51.6	50.6	50.6	50.8	51.6	56.0	48.3		
" 23,.....	50.5	49.8	49.3	49.2	49.8	49.5	48.8	49.4	50.1	51.5	51.8	52.8	53.6	54.9	54.0	53.2	52.8	52.7	52.8	52.8	52.3	51.7	51.5	50.0	51.5	54.9	48.8	
" 24,.....	49.2	49.6	49.6	50.2	49.2	49.8	50.4	50.0	50.7	51.5	52.1	54.5	55.5	55.7	56.7	58.4	57.5	56.6	56.1	56.6	56.6	56.5	56.7	56.4	53.6	59.3	49.2	
" 25,.....	56.0	55.4	55.8	55.9	56.1	56.4	56.6	57.4	58.5	60.6	61.1	61.8	62.5	62.1	62.0	62.0	61.9	60.5	59.8	59.4	59.7	59.8	60.4	60.8	59.3	63.4	55.4	
" 26,.....	61.3	61.1	58.0	58.3	59.0	59.1	58.9	60.2	60.3	61.6	61.9	63.1	63.3	62.1	61.1	58.6	58.3	58.4	58.1	57.8	57.7	56.6	56.8	56.1	59.5	63.5	56.1	
" 27,.....	56.0	55.6	55.4	55.0	54.9	55.2	55.2	55.2	55.2	57.1	58.5	59.5	61.6	61.3	60.2	59.4	58.4	58.2	58.0	58.6	58.3	56.9	56.0	57.5	61.8	54.7		
" 28,.....	55.4	54.9	55.2	54.9	54.5	54.9	54.8	55.4	55.8	56.4	56.5	56.6	56.6	55.3	55.7	55.5	54.8	55.0	55.4	55.5	55.6	55.6	55.5	55.5	56.9	54.4		
Hourly Means,.....	52.8	52.7	52.4	52.3	52.1	52.1	52.0	52.5	53.2	54.1	54.5	55.1	55.3	55.4	55.2	55.0	54.6	54.0	53.8	53.8	53.8	53.6	53.5	53.4	53.6	56.4	50.8	

† Approximate.

* Interpolated.

TABLE III.

TEMPERATURE OF EVAPORATION AND RADIATION, FOR THE MONTH OF FEBRUARY, 1886.

(16)

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.	Sun.	Rad.	
Feb. 1.....	*36.6	*36.5	*36.5	*36.3	*36.3	*36.2	*36.2	*36.5	*37.6	39.4	40.1	39.6	40.4	40.8	40.5	39.9	40.6	40.6	41.1	41.3	42.3	43.2	43.7	44.2	39.4	122.5	46.4	
" 2.....	45.4	*45.3	*45.1	*45.0	*44.8	*44.7	*44.5	*44.4	*44.1	44.0	44.4	43.4	44.4	*44.3	44.2	44.2	44.6	43.1	44.3	45.5	47.8	48.1	48.2	48.1	45.1	78.2	48.4	
" 3.....	48.0	47.9	48.0	47.0	47.3	47.0	47.5	47.6	47.2	48.1	47.9	47.5	46.5	46.3	46.0	46.7	46.6	47.0	47.3	47.7	48.3	48.6	48.6	48.7	47.5	75.2	47.6	
" 4.....	48.6	47.9	48.4	†47.5	†47.4	48.1	*48.5	*48.8	*49.1	*49.4	49.7	50.5	50.2	50.5	50.1	50.7	50.9	51.5	51.9	52.3	52.6	53.1	53.2	53.3	50.2	71.8	48.6	
" 5.....	53.3	53.5	53.7	53.9	54.0	54.1	54.5	54.9	55.0	55.4	55.9	56.1	55.7	56.4	56.9	57.7	58.1	58.3	58.8	59.3	59.4	60.1	60.4	56.4	73.5	52.8		
" 6.....	60.5	61.7	60.6	60.7	57.4	54.6	54.9	53.9	54.9	53.5	53.8	54.6	54.5	54.4	53.2	53.2	51.9	51.4	50.8	49.4	47.7	47.1	46.5	45.4	53.6	128.0	51.8	
" 7.....	44.0	42.5	*42.5	*42.5	*42.5	*42.6	*42.6	*42.6	42.6	43.0	42.6	43.4	43.4	43.7	43.8	44.1	44.3	43.8	43.7	43.8	43.7	43.1	44.1	43.2	112.4	44.7		
" 8.....	43.6	42.8	43.2	42.5	41.0	39.6	39.2	40.2	42.3	43.4	44.1	45.1	45.4	45.0	45.5	46.1	46.4	45.0	45.2	45.8	46.2	47.1	47.6	47.9	44.2	118.9	45.5	
" 9.....	47.9	48.2	47.9	47.5	47.7	48.2	48.7	48.9	48.6	48.6	48.4	48.5	49.0	49.1	48.7	49.4	49.4	50.0	50.1	50.5	51.6	52.1	52.4	52.4	49.8	97.9	50.6	
" 10.....	52.6	52.7	52.7	52.6	52.5	52.3	52.4	52.5	53.0	53.1	52.9	52.8	53.1	52.9	52.9	53.3	53.4	53.7	53.9	52.6	53.0	53.0	52.5	52.4	52.9	64.4	52.3	
" 11.....	51.2	51.2	50.3	49.6	49.0	49.9	50.7	49.9	50.6	50.6	50.2	50.0	49.4	49.1	48.8	47.5	47.1	46.6	*46.3	*46.0	*45.7	45.4	45.4	45.0	48.6	73.7	48.4	
" 12.....	44.7	43.9	43.6	43.9	44.3	44.1	44.3	*45.6	*46.9	48.2	48.0	48.8	49.0	48.5	48.9	49.4	49.1	48.7	48.8	48.7	48.6	48.5	48.3	48.6	47.1	103.3	47.7	
" 13.....	48.5	48.4	48.3	48.3	48.3	48.2	48.2	48.5	49.2	49.8	50.7	51.1	51.5	51.4	49.7	49.4	48.5	49.3	50.6	50.4	50.4	50.3	50.3	50.2	49.6	98.9	51.6	
" 14.....	50.2	49.6	49.3	49.0	48.7	49.1	49.2	49.8	50.6	51.4	50.6	49.4	47.6	48.6	49.3	49.9	49.6	50.1	50.9	51.1	51.4	51.5	51.8	51.9	50.0	121.2	52.2	
" 15.....	51.5	51.2	50.8	50.7	49.9	50.6	50.0	50.7	51.5	52.4	52.6	53.1	53.0	52.9	53.7	54.1	54.6	54.2	54.0	53.7	53.9	54.3	54.4	54.3	52.6	92.2	52.8	
" 16.....	54.9	54.9	53.9	53.9	54.2	53.1	52.9	52.7	52.9	52.4	52.2	52.1	53.4	53.1	53.1	52.5	52.6	51.9	51.8	52.0	51.1	51.1	50.8	49.9	49.6	52.5	94.4	50.8
" 17.....	48.1	47.3	46.6	47.3	45.8	47.0	47.1	47.0	47.3	47.3	47.6	48.1	47.7	47.9	48.0	48.0	47.9	47.0	47.2	47.4	47.8	47.4	47.1	47.3	47.4	73.0	47.3	
" 18.....	47.9	48.0	47.9	48.1	48.0	48.2	48.2	48.3	48.5	48.9	48.6	48.9	49.1	49.4	49.4	50.1	50.6	50.6	50.7	50.9	51.2	51.1	51.2	51.1	51.0	49.4	67.7	47.7
" 19.....	50.9	50.9	51.1	51.5	51.6	51.9	51.6	52.3	53.1	53.5	54.1	53.3	53.0	53.1	53.4	53.5	53.0	52.4	52.1	52.0	52.1	52.1	52.0	51.8	51.6	52.3	93.7	51.3
" 20.....	51.5	51.4	50.9	50.9	50.6	50.9	51.5	52.0	52.5	53.4	54.2	55.1	54.4	54.5	54.4	54.6	54.6	58.6	53.1	52.8	53.6	52.4	50.8	50.7	50.5	52.5	106.6	50.8
" 21.....	49.6	49.4	49.8	50.0	49.2	48.5	48.3	48.3	48.5	49.3	49.2	49.5	51.3	50.0	49.5	50.4	49.4	48.3	48.2	48.0	47.9	47.1	46.0	46.5	48.8	97.0	50.8	
" 22.....	45.1	45.4	44.0	43.6	43.8	44.7	43.1	45.3	45.9	46.2	47.7	47.4	48.1	48.0	47.1	47.1	45.6	44.3	44.7	44.8	44.6	44.6	44.7	45.5	45.5	120.6	45.7	
" 23.....	45.6	44.6	44.1	44.6	45.5	44.8	43.6	43.8	44.0	45.8	46.1	46.5	47.2	48.4	48.1	47.9	47.9	48.2	48.9	48.5	47.7	47.4	47.6	47.7	46.4	122.3	49.0	
" 24.....	46.8	47.4	47.3	48.1	47.4	48.2	48.2	47.7	48.4	49.3	49.8	51.1	52.1	52.4	52.8	54.3	54.3	53.6	53.2	54.1	54.7	55.2	55.4	55.4	51.1	97.5	48.4	
" 25.....	55.8	54.5	54.6	55.0	55.4	55.6	55.8	56.4	57.1	58.2	58.5	58.5	59.0	58.5	58.2	58.2	58.3	57.8	57.1	57.5	57.9	58.5	59.0	59.6	57.2	96.7	54.8	
" 26.....	60.0	60.1	57.3	57.7	58.4	58.4	58.1	59.1	58.5	59.4	59.2	60.2	60.2	59.5	58.4	57.7	57.7	58.1	57.9	57.5	57.3	56.1	56.2	55.6	58.3	127.7	55.6	
" 27.....	55.4	54.7	54.4	54.2	54.1	54.3	53.9	54.1	54.0	54.5	54.8	55.3	55.5	56.5	56.4	55.5	55.4	55.3	54.5	54.4	54.4	53.8	54.3	53.6	54.8	109.6	55.3	
" 28.....	52.8	52.6	52.7	52.2	51.8	51.7	51.7	51.7	51.9	52.9	53.2	53.5	53.5	52.3	52.5	53.6	53.4	53.7	54.0	53.5	53.6	53.6	53.7	54.4	52.9	114.9	54.2	
.....	
Hourly Means,	49.7	49.4	49.1	49.1	48.8	48.8	48.8	49.1	49.5	50.0	50.3	50.5	50.6	50.6	50.5	50.7	50.5	50.3	50.4	50.4	50.5	50.5	50.5	50.0	98.3	49.9		

* Interpolated.

† Approximate.

TABLE IV.

TABLE IV.
MEAN HOURLY AND DAILY RELATIVE HUMIDITY AND TENSION OF AQUEOUS VAPOUR
FOR THE MONTH OF FEBRUARY, 1886.

Hour.	Hourly Mean.		Date.	Daily Mean.	
	Humidity.	Tension.		Humidity.	Tension.
			1886.		
1 a	79	0.321	Feb. 1,.....	37	0.129
2 "	76	0.314	" 2,.....	56	0.215
3 "	76	0.310	" 3,.....	71	0.274
4 "	77	0.311	" 4,.....	86	0.338
5 "	76	0.307	" 5,.....	96	0.448
6 "	76	0.307	" 6,.....	73	0.352
7 "	77	0.308	" 7,.....	53	0.193
8 "	75	0.309	" 8,.....	58	0.214
9 "	74	0.311	" 9,.....	76	0.307
10 "	73	0.312	" 10,.....	91	0.385
11 "	72	0.314	" 11,.....	76	0.296
Noon.	70	0.312	" 12,.....	69	0.267
1 p	69	0.312	" 13,.....	71	0.298
2 "	69	0.311	" 14,.....	71	0.303
3 "	69	0.311	" 15,.....	76	0.347
4 "	71	0.319	" 16,.....	83	0.362
5 "	73	0.319	" 17,.....	82	0.297
6 "	75	0.321	" 18,.....	85	0.325
7 "	76	0.327	" 19,.....	88	0.370
8 "	76	0.327	" 20,.....	82	0.361
9 "	77	0.329	" 21,.....	73	0.293
10 "	79	0.332	" 22,.....	59	0.226
11 "	79	0.333	" 23,.....	66	0.249
Midt.	79	0.334	" 24,.....	83	0.343
			" 25,.....	88	0.442
			" 26,.....	93	0.473
			" 27,.....	83	0.895
			" 28,.....	84	0.368
		
		
		
Mean,	75	0.317	Mean,.....	75	0.817

TABLE V.
DURATION OF SUNSHINE.

TABLE VI.

RAINFALL FOR THE MONTH OF FEBRUARY, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Sums.	
Feb. 1,	
" 2,	0·005	...	...	...	0·005	
" 3,	
" 4,	0·005	...	...	0·005	...	...	...	0·005	...	...	...	...	0·005	0·020	
" 5,	0·005	...	0·035	0·065	0·060	0·020	0·005	0·015	...	0·015	0·095	0·065	0·060	0·060	0·505
" 6,	0·030	0·015	0·005	0·095	0·195	0·025	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·015	0·060	0·060	0·060	0·365
" 7,	
" 8,	
" 9,	
" 10,	0·005	...	0·005	0·040	0·020	0·040	0·025	0·065	0·025	0·155	0·155	0·005	...	0·540
" 11,	
" 12,	
" 13,	
" 14,	
" 15,	0·005	...	...	0·005	0·010	
" 16,	
" 17,	
" 18,	
" 19,	0·005	...	...	0·005	0·005	
" 20,	0·005	...	...	...	...
" 21,	
" 22,	
" 23,	0·005	...	...	0·010	0·010	
" 24,	0·005	...	...	...	0·010	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·005	...	...	0·005	0·025	
" 25,	
" 26,	0·005	...	0·005	...	0·010	...	...	...	...	0·010	...	...	...	...	...	...	...	...	...	0·005	...	0·005	...	0·030	
" 27,	0·005	...	0·005	...	...	...	...	...	...	0·010	...	...	...	...	...	...	...	...	...	0·005	...	0·005	...	0·020	
" 28,	
.....	
.....	
.....	
Sums,.....	0·045	0·015	0·015	0·095	0·220	0·025	...	0·015	...	0·015	...	...	0·035	0·070	0·100	0·040	0·045	0·040	0·070	0·040	0·260	0·235	0·070	0·085	1·535

TABLE VII.

DIRECTION AND VELOCITY OF THE WIND, FOR THE MONTH OF FEBRUARY, 1886.

TABLE VIII.

MEAN HOURLY COMPONENTS AND MEAN DIRECTION OF THE WIND, FOR FEBRUARY, 1886.

Hour.	Components (miles per hour).						Direction.
	N	E	S	W	+ N-S	+ E-W	
1 a.	4.9	12.8	0.0	0.3	+ 4.9	+ 12.5	E 22° N
2 "	5.5	12.5	0.0	0.1	5.5	12.5	E 24° N
3 "	5.5	11.2	0.2	0.3	5.3	10.9	E 26° N
4 "	4.8	11.8	0.1	0.2	4.7	11.6	E 22° N
5 "	4.6	11.3	0.0	1.1	4.6	10.2	E 24° N
6 "	3.9	12.1	0.0	1.2	3.9	10.9	E 20° N
7 "	3.1	11.5	0.2	1.4	3.0	10.1	E 17° N
8 "	3.7	11.2	0.3	1.5	3.4	9.7	E 19° N
9 "	4.6	12.8	0.0	1.0	4.6	11.9	E 21° N
10 "	3.2	14.3	0.1	0.7	3.1	13.6	E 13° N
11 "	3.4	14.4	0.2	1.3	3.2	13.1	E 14° N
Noon.	2.6	13.9	0.2	1.2	2.4	12.7	E 11° N
1 p.	2.3	14.9	0.3	1.3	2.0	13.6	E 9° N
2 "	1.5	15.3	0.3	1.4	1.2	14.0	E 5° N
3 "	3.1	14.8	0.0	1.4	3.1	12.9	E 14° N
4 "	3.1	13.9	0.2	1.0	2.8	12.9	E 12° N
5 "	2.6	13.5	0.1	1.0	2.5	12.5	E 11° N
6 "	2.5	13.3	0.1	0.5	2.5	12.8	E 11° N
7 "	2.8	12.5	0.2	0.8	2.0	12.2	E 9° N
8 "	2.9	13.3	0.0	0.1	2.9	13.2	E 13° N
9 "	3.9	13.9	0.4	0.1	3.5	13.8	E 14° N
10 "	4.2	14.0	0.1	0.1	4.2	13.9	E 17° N
11 "	5.0	13.6	0.0	0.2	5.0	13.4	E 21° N
Midt.	4.5	13.5	0.0	0.1	4.5	13.4	E 19° N
Mean,.....	3.7	13.2	0.1	0.7	+ 3.5	+ 12.4	E 16° N

TABLE IX.

DIRECTION AND FORCE OF THE WIND AT VICTORIA PEAK, AND SEA DISTURBANCE.

DATE.	4 a.			10 a.			4 p.			10 p.		
	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.	Sea.
1886.												
Feb.	1,.....	...	2	NNE	4	2	E	5	2	E	5	3
"	2,.....	...	4	E	5	3	E	4	3	E	4	3
"	3,.....	...	4	E	6	4	E	6	4	E	6	5
"	4,.....	...	5	E	7	5	E	6	4	E	6	4
"	5,.....	...	3	SE	7	3	SSE	6	2	SE	5	1
"	6,.....	...	1	N	5	2	N	6	1	N	6	2
"	7,.....	...	3	N	5	2	N	5	2	N	5	1
"	8,.....	...	3	E	4	3	E	5	3	E	5	3
"	9,.....	...	4	E	6	4	E	6	4	E	6	4
"	10,.....	...	3	SE	6	2	E	6	2	E	5	2
"	11,.....	...	3	ENE	5	2	E	4	2	NE	5	2
"	12,.....	...	2	ENE	5	2	E	4	3	NE	5	3
"	13,.....	...	3	E	5	2	E	6	3	NE	4	3
"	14,.....	...	3	E	6	3	E	5	2	E	6	4
"	15,.....	...	3	E	6	3	E	6	3	E	6	2
"	16,.....	...	4	E	6	3	E	6	3	E	6	4
"	17,....	...	4	E	6	4	E	6	4	E	7	5
"	18,....	...	5	E	7	5	E	6	5	E	6	5
"	19,....	...	4	E	6	4	E	5	4	E	5	3
"	20,....	...	2	E	5	2	E	4	1	NE	4	2
"	21,....	...	2	NE	5	2	NW	5	1	N	5	1
"	22,....	...	1	N	6	1	NW	6	1	NE	6	1
"	23,....	...	3	N	4	2	N	3	2	NE	5	2
"	24,....	...	1	N	5	1	E	4	1	E	6	2
"	25,....	...	1	E	5	1	SE	5	1	SE	4	1
"	26,....	...	0	SE	4	0	E	3	0	SE	4	2
"	27,....	...	3	NE	4	2	NE	3	0	N	3	2
"	28,....	...	4	E	6	3	E	6	4	E	6	4
.....
Mean,.....	...	...	2.9	E 13° N	5.4	2.6	E 11° N	5.0	2.4	E 13° N	5.2	2.5

TABLE X.
VICTORIA PEAK.

DATE.	BAROMETER.			TEMPERATURE.						
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	Sun.	Max.	Min.	Rad.
1886.	ins.	ins.	ins.	°	°	°	°	°	°	°
1.....	28.326	28.210	28.205	39.9	41.9	40.5	116.0	43.1	36.7	36.8
2.....	.281	.206	.206	41.9	43.5	41.1	83.2	44.0	38.7	39.3
3.....	.249	.180	.212	43.6	43.7	41.7	72.0	44.0	37.7	38.7
4.....	.204	.129	.151	44.5	45.5	49.9	79.4	50.7	41.5	44.5
5.....	.141	.069	.057	55.6	58.9	57.5	72.0	59.2	49.5	49.3
6.....	.139	.078	.095	53.3	54.5	51.5	118.0	55.4	40.7	33.7
7.....	.309	.277	.264	45.5	46.7	44.5	98.0	51.8	42.3	36.3
8.....	.382	.298	.312	44.5	46.7	45.5	121.0	51.9	42.9	42.4
9.....	.279	.164	.190	45.3	46.5	47.6	98.1	48.9	43.5	39.5
10.....	.154	.076	.129	48.9	48.7	46.9	88.1	50.9	45.3	43.8
11.....	.263	.211	.298	47.5	47.4	44.4	62.2	48.9	42.8	37.7
12.....	.343	.267	.312	46.6	46.9	45.5	109.0	48.9	43.3	40.3
13.....	.329	.234	.236	46.6	46.5	45.3	96.6	47.8	43.3	42.9
14.....	.284	.169	.210	46.7	47.6	46.9	117.1	48.1	44.9	43.4
15.....	.237	.144	.205	48.6	49.5	48.5	86.4	51.1	43.8	41.9
16.....	.273	.197	.292	49.3	48.1	45.7	96.6	50.1	43.5	42.7
17.....	.376	.275	.305	45.7	45.5	46.1	67.2	47.5	43.3	41.3
18.....	.355	.256	.336	44.5	45.5	44.9	72.6	47.1	42.7	41.5
19.....	.448	.362	.393	47.5	48.5	48.5	103.4	52.1	44.9	45.3
20.....	.427	.329	.371	48.6	51.9	47.7	117.0	52.3	44.9	44.1
21.....	.381	.267	.327	47.5	46.5	45.5	92.2	52.9	43.1	38.7
22.....	.386	.351	.375	44.9	46.5	44.7	116.8	47.9	43.7	39.9
23.....	.419	.311	.300	44.7	46.7	45.1	111.2	48.9	43.5	39.1
24.....	.347	.238	.257	48.7	51.5	52.5	117.4	54.3	42.7	45.3
25.....	.292	.196	.206	53.5	58.7	56.7	87.8	59.0	51.7	47.7
26.....	.259	.165	.218	59.6	57.5	56.3	129.4	62.0	54.7	50.5
27.....	.299	.233	.243	55.1	55.9	54.3	103.4	59.8	51.1	48.9
28.....	.252	.177	.186	51.4	51.9	51.1	88.6	55.8	49.7	49.3
.....
.....
.....
Mean,.....	28.301	28.217	28.246	47.9	48.9	47.7	97.2	51.2	44.2	42.3

TABLE XI.
HUMIDITY AT THE OBSERVATORY AND AT VICTORIA PEAK.

DATE.	RELATIVE HUMIDITY.						TENSION OF AQUEOUS VAPOUR.					
	OBSERVATORY.			VICTORIA PEAK.			OBSERVATORY.			VICTORIA PEAK.		
1886.	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.
1.....	35	32	50	74	72	66	0.123	0.115	0.186	0.184	0.193	0.168
2.....	49	46	70	83	76	88	.191	.183	.279	.223	.217	.229
3.....	71	63	83	90	88	82	.281	.247	.311	.261	.255	.217
4.....	88	86	93	98	99	91	.330	.344	.391	.291	.307	.331
5.....	94	97	96	95	97	99	.429	.470	.499	.426	.490	.477
6.....	77	59	68	97	94	90	.361	.311	.263	.399	.400	.347
7.....	51	49	53	66	76	84	.181	.187	.197	.206	.245	.250
8.....	51	60	68	79	87	77	.191	.235	.263	.236	.283	.239
9.....	73	74	84	92	92	87	.290	.304	.358	.281	.294	.291
10.....	94	93	94	96	98	96	.394	.394	.391	.338	.342	.314
11.....	74	75	71	93	85	92	.317	.284	.251	.310	.284	.274
12.....	70	73	68	85	90	86	.281	.303	.279	.275	.291	.264
13.....	71	59	78	91	98	93	.298	.268	.323	.293	.314	.286
14.....	74	65	77	92	87	85	.330	.286	.335	.297	.291	.276
15.....	69	83	76	87	93	92	.328	.385	.370	.303	.331	.318
16.....	78	81	93	93	96	94	.347	.357	.358	.333	.329	.295
17.....	77	79	88	96	99	87	.285	.297	.307	.300	.307	.276
18.....	83	81	90	99	99	89	.315	.326	.360	.296	.307	.267
19.....	84	83	95	99	92	99	.378	.376	.380	.331	.318	.344
20.....	81	78	77	78	83	73	.370	.379	.326	.269	.327	.247
21.....	67	68	75	98	85	70	.284	.301	.280	.326	.271	.215
22.....	58	52	59	83	85	90	.231	.228	.217	.249	.271	.270
23.....	62	65	70	84	83	89	.234	.265	.272	.252	.269	.269
24.....	85	76	92	91	99	100	.324	.369	.420	.316	.384	.401
25.....	85	78	92	99	92	88	.455	.436	.475	.413	.462	.406
26.....	87	94	97	84	94	100	.479	.466	.446	.433	.448	.460
27.....	84	72	73	94	92	90	.392	.386	.356	.410	.417	.386
28.....	78	88	88	92	95	95	.356	.387	.387	.354	.374	.362
.....
.....
.....
Mean,.....	73	72	79	90	90	88	0.313	0.317	0.331	0.307	0.322	0.303

TABLE XII.

AMOUNT AND CLASSIFICATION OF CLOUDS AND DIRECTION WHENCE COMING.

DATE.	1 a.			4 a.			7 a.			10 a.		
	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction
1886.	-	-	-	-	-	-	-	-	-	-	-	-
Feb. 1,	7*	cum.	...	10	str.	NNW	10	cum.	NNW	9	sm-cum.	NNW
,, 2,	10	cum.	...	10	cum.	...	10	str. cum.	W	10	str.	...
,, 3,	10	cum-nim.	...	10	nim.	...	10	cum-nim.	E	10	cum. cum-nim.	S E
,, 4,	10	cum-nim.	...	10	nim.	E	10	nim.	E	10	nim.	E
,, 5,	10	nim.	...	10	nim.	E	10	cum-nim.	...	10	nim.	E
,, 6,	10	nim.	...	10	nim.	...	10	cum-nim.	...	4	R-cum.	NNW
,, 7,	10	str.	...	10	cum.	...	5	cum.	W	7	sm-cum.	W
,, 8,	10	str.	...	10	cum.	...	10	cum.	W	10	sm-cum.	WNW
,, 9,	10	cum.	...	10	cum-nim.	...	10	cum-nim.	...	10	str. cum-nim.	ESE
,, 10,	10	cum-nim.	...	10	nim.	E	10	cum-nim.	...	10	nim.	E
,, 11,	10	nim.	...	10	nim.	NE	10	cum-nim.	ENE	10	cum-nim.	NE
,, 12,	10	cum.	...	10	cum.	...	10	cum.	...	8	cum. cum.	WNW
,, 13,	10	str.	...	10	cum.	...	10	sm-cum.	WNW	10	sm-cum.	ENE
,, 14,	10	cum.	...	10	nim.	E	10	cum.	E	8	cum. sm-cum. cum.	W E
,, 15,	10	cum.	SE	6	R-cum.	E	10	cum-nim.	ESE	10	R-cum.	E
,, 16,	10	cum.	...	10	nim.	E	10	cum-nim.	E	10	cum-nim.	E
,, 17,	10	cum-nim.	NE	10	cum-nim.	NE	10	cum-nim.	ENE	10	cum-nim.	E
,, 18,	10	cum-nim.	...	10	cum-nim.	...	10	cum-nim.	...	10	cum-nim.	...
,, 19,	10	nim.	E	10	nim.	E	10	cum-nim.	E	10	R-cum. cum-nim. cum.	SSW ESI ESI
,, 20,	10	nim.	E	10	nim.	...	10	cum-nim.	E	10	cum-nim.	E
,, 21,	10	cum-nim.	...	10	nim.	...	10	cum.	E	10	str.	...
,, 22,	10	str.	...	9	R-cum.	...	10	cum.	SW	10	str. cum.	SW
,, 23,	10	str.	...	10	cum.	...	10	cum.	SW	10	cum.	SW
,, 24,	10	cum-nim.	...	10	cum-nim.	...	10	cum-nim.	E	10	cum-nim.	...
,, 25,	10	cum-nim.	...	10	nim.	...	10	cum-nim.	SSW	10	cum. cum-nim. cum.	SSW
,, 26,	10	nim.	...	10	nim.	...	10	cum-nim.	SSW	10	cum-nim. str. cum-nim.	WS
,, 27,	10	nim.	...	10	nim.	...	10	nim.	...	10	...	...
,, 28,	10*	str.	...	10	cum.	...	7	sm-cum. cum.	WSW E	10	cum-nim.	...
.....
.....
.....
Mean,.....	9.9	...	...	9.8	...	...	9.7	...	...	9.5	...	...

* Interpolated.

TABLE XII.—*Continued.*

AMOUNT AND CLASSIFICATION OF CLOUDS AND DIRECTION WHENCE COMING.

TE.	1 p.			4 p.			7 p.			10 p.			Daily and Monthly Means.
	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	
386.													
1,.....	7	sm-cum.	W	2	sm-cum.	W	1	cum.	WNW	10	cum.	WNW	7.0
2,.....	10	str.	...	10	str. cum-nim.	SW	10	str.	...	10	nim.	...	10.0
3,.....	10	str. cum-nim.	E	10	R-cum.	ESE	10	nim.	...	10	nim.	...	10.0
4,.....	10	nim.	E	10	cum-nim.	E	10	nim.	...	10	nim.	...	10.0
5,.....	10	nim.	S	10	cum-nim. nim.	W S	10	nim.	...	10	nim.	...	10.0
6,.....	7	cum. R-cum.	W WNW	10	cum. R-cum.	W W	10	cum.	W	10	str.	...	8.9
7,.....	10	str.	WNW	10	cum.	W	6	c-str. cum.	...	10	c-str. cum.	...	8.5
8,.....	9	cum.	NW	7	sm-cum.	WNW	6	cum.	WNW	7	cum.	WNW	8.6
9,.....	10	sm-cum. cum.	W ESE	10	sm-cum. R-cum.	WNW ESE	10	cum.	...	10	cum.	...	10.0
10,.....	10	nim.	E	10	nim.	E	10	nim.	...	10	nim.	...	10.0
11,.....	10	cum-nim.	NE	10	cum-nim.	NE	10	str.	...	10	str.	...	10.0
12,.....	10	cum.	ENE	10	sm-cum. cum.	W E	10	cum.	E	10	str.	...	9.7
13,.....	10	cum.	W	10	cum-nim.	W	10	cum-nim.	...	10	eum.	E	10.0
14,.....	7	cum.	W	10	sm-cum. cum.	W E	10	cum-nim.	E	10	cum.	...	9.4
15,.....	10	cum-nim.	E	10	cum-nim.	E	10	cum.	S	10	cum.	SSW	9.5
16,.....	10	cum-nim.	E	10	cum. cum-nim.	SE E	10	nim.	E	10	nim.	E	10.0
17,.....	10	cum-nim.	E	10	cum-nim.	E	10	nim.	ENE	10	nim.	ENE	10.0
18,.....	10	cum-nim.	E	10	cum-nim.	E	10	nim.	E	10	nim.	E	10.0
19,.....	10	cum. cum-nim.	SW ESE	10	cum-nim.	E	10	nim.	E	10	nim.	E	10.0
20,.....	10	str. cum.	E	10	str. R-cum.	E	10	R-cum.	E	10	R-cum.	E	10.0
21,.....	10	str.	NNW	10	str.	...	10	str.	...	10	str.	...	10.0
22,.....	10	str.	...	10	sm-cum. str.	W ...	10	str.	...	10	str.	...	9.9
23,.....	7	sm-cum.	SSW	10	sm-cum.	S	10	cum.	...	10	eum.	...	9.6
24,.....	10	str.	SW	10	str.	SW	10	cum-nim.	...	10	nim.	...	10.0
25,.....	10	cum. cum-nim.	sw SE	10	cum.	S	1	cum.	...	9	str.	...	8.8
26,.....	10	cum.	SW	10	str.	...	10	nim.	...	10	nim.	...	10.0
27,.....	10	str. R-cum.	NNE	10	str.	W	10	str.	...	10	str.	...	10.0
28,.....	10	cum-nim.	E	10	cum-nim.	E	10	cum-nim.	...	10	nim.	...	9.6
.....
.....
.....
Mean,.....	9.5	...	...	9.6	...	...	9.1	...	...	9.9	...	...	9.6

TABLE XIII.
RAINFALL AT DIFFERENT STATIONS.

DATE.	OBSERVATORY.		STONE CUTTERS' ISLAND.		VICTORIA PEAK.	
	Amount.	Duration.	Amount.	Amount.	Amount.	Amount.
1886.	ins.	hrs.	ins.	ins.	ins.	ins.
Feb. 1,.....	...	...	...	...	...	...
" 2,.....	0.005	1	...	...	...	...
" 3,.....	0.005	14	...	...	...	...
" 4,.....	0.025	20	...	...	0.30	0.30
" 5,.....	0.860	20	1.02	...	1.12	1.12
" 6,.....	...	...	...	...	...	...
" 7,.....	...	...	...	...	...	...
" 8,.....	...	...	...	...	...	...
" 9,.....	0.010	4	...	...	...	...
" 10,.....	0.530	9	0.38	...	0.40	0.40
" 11,.....	...	2	...	...	...	...
" 12,.....	...	...	...	...	...	...
" 13,.....	...	...	...	...	...	...
" 14,.....	...	...	...	...	...	...
" 15,.....	...	...	...	...	0.20	0.20
" 16,.....	0.010	5	...	...	0.15	0.15
" 17,.....	...	5	...	...	0.18	0.18
" 18,.....	...	6	...	...	...	...
" 19,.....	0.005	4	...	...	...	...
" 20,.....	...	...	...	...	...	...
" 21,.....	...	...	...	...	...	...
" 22,.....	...	...	...	...	...	...
" 23,.....	0.025	3	...	...	...	...
" 24,.....	0.010	3	...	...	...	...
" 25,.....	0.020	3	...	...	0.18	0.18
" 26,.....	0.030	15	...	...	...	...
" 27,.....	...	...	...	...	...	...
" 28,.....	...	13	...	...	...	...
.....
.....
.....
Total,.....	1.535	127	1.40	...	2.53	2.53

W. DOBERCK,
Government Astronomer.

Hongkong Observatory, 13th May, 1886.

HONGKONG OBSERVATORY.

Weather Report for March, 1886.

In the *China Coast Meteorological Register*, based on information transmitted by the Great Northern and the Eastern Extension Telegraph Companies, which was daily published, is given a summary of the spheric circumstances in Luzon and along the Coast of China. It also contains information concerning the weather in Nagasaki and Vladivostock.

No unusual visibility was noted during this month.

Strong dew fell on the evening of the 13th, 16th, and 18th.

Fog was extremely prevalent during the month and appears to have frequently extended along the whole length of the China Coast.

Fog occurred at sea level from the 1st to the 5th incl., during the night between the 5th and the 6th, on the morning of the 8th, from the 9th to the 23rd incl., on the morning of the 29th and on the 1st.

Fog occurred round the Observatory on the evening of the 1st. From the forenoon of the 2nd to the morning of the 3rd. On the afternoon of the 3rd. On the evening of the 9th. During the forenoon of the 15th, during the three following nights and on the 19th.

Solar halos were seen on the 17th and 18th.

A solar corona was seen on the 18th.

A lunar halo was seen on the night between the 16th and the 17th.

A moderate thunderstorm passed from N to NE on the evening of the 4th. It was nearest at 1 p. (about 14°).

Thunder and lightning occurred between the morning of the 14th and the following morning. A moderate thunderstorm passed from SW to NE between 1.30 and 3 p. A ship in the harbour was struck. Another storm west of here passing from SW to NE was nearest about 6.30 p. (30°).

Between 5 a. and 6 a. on the 15th a thunderstorm passed from SW to NE. It was nearest at 5 a. (6°).

Thunder was heard during the day on the 23rd.

Lightning was seen in the early morning hours on the 31st and thunder was heard during the day.

The total distance traversed by, as well as the duration and average velocity of winds from different quarters were as follows:—

<i>Direction.</i>	<i>Total Distance.</i>	<i>Duration.</i>	<i>Velocity.</i>
	Miles.	Hours.	Miles per hour.
N	648	64	10.1
NE	675	69	9.8
E	10095	545	18.5
SE	201	22	9.1
S	203	15	13.5
SW	41	5	8.2
W	94	7	13.4
NW	52	8	6.5
Calm	4	9	0.4

TABLE I.

BAROMETRIC PRESSURE FOR THE MONTH OF MARCH, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.	
Mar. 1, ...	29.975	29.949	29.941	29.922	29.925	29.944	29.951	29.974	29.982	29.994	29.981	29.943	29.912	29.888	29.861	29.851	29.864	29.885	29.893	29.911	29.917	29.928	29.933	29.932	29.927	
" 2, ...	.925	.912	.910	.900	.891	.910	.923	.955	.968	.969	.950	.925	.909	.883	.859	.857	.863	.870	.883	.908	.925	.943	.948	.947	.914
" 3, ...	.934	.918	.917	.909	.910	.935	.957	.986	.993	30.009	30.000	.978	.945	.923	.907	.908	.909	.912	.943	.957	.958	.971	.977	.978	.947
" 4, ...	.970	.958	.960	.959	.964	.995	30.013	30.032	30.034	.059	.051	30.035	30.009	.985	.968	.963	.975	.994	30.002	30.013	30.028	30.047	30.050	30.039	30.004
" 5, ...	30.034	30.022	30.006	.998	30.024	30.033	.070	.093	.103	.118	.118	.110	.088	30.072	30.055	30.067	30.069	30.074	.090	.112	.123	.146	.134	.130	.079	
" 6, ...	.121	.110	.080	30.080	.091	.097	.108	.133	.138	.142	.150	.129	.118	.090	.074	.079	.080	.091	.104	.128	.142	.150	.122	.127	.112
" 7, ...	.110	.099	.067	.039	29.984	.018	.060	.114	.130	.109	.100	.091	.074	.039	.038	.037	.039	.033	.032	.044	.050	.055	.049	.041	.060
" 8, ...	.038	.037	.026	29.996	* 30.000	* .009	* .031	* .061	* .079	.081	.069	.046	.008	29.991	29.980	29.976	29.977	.010	.023	.037	.050	.059	.053	.035	.028
" 9, ...	.017	.011	29.981	.976	29.980	29.992	.011	.026	.960	.069	.067	.036	29.998	.975	.960	.964	.969	29.977	29.999	.005	.015	.027	.026	.026	.007
" 10, ...	.008	.000	30.008	30.010	30.031	30.051	.066	.093	.107	.125	.124	.097	30.066	30.055	30.036	30.019	30.027	30.047	30.068	.098	.111	.112	.112	.107	.066
" 11, ...	.085	.068	.061	.049	.047	.068	.073	.074	.097	.084	.074	.067	.032	.006	29.972	29.964	29.955	29.964	29.969	29.992	.001	.012	.011	29.998	.030
" 12, ...	29.987	29.969	29.966	29.965	29.975	29.983	.002	.022	.037	.027	.000	29.971	29.936	29.915	.899	.880	.883	.890	.903	.921	29.936	29.938	29.932	.923	29.953	
" 13, ...	.914	.898	.890	.882	* .887	* .900	* 29.922	* 29.944	* 29.966	29.972	29.959	.926	.894	.868	.855	.851	.847	.851	.869	.888	.909	.907	.914	.899	.900
" 14, ...	.875	.850	.836	.838	* .844	* .857	* .881	* .904	.921	.922	.910	.891	.853	.793	.830	.805	.780	.811	.785	.808	.834	.824	.825	.822	.846
" 15, ...	.801	.799	.771	.750	.786	.765	.814	.823	.839	.857	.853	.832	.795	.768	.758	.758	.768	.790	.805	.823	.835	.843	.840	.835	.805
" 16, ...	.824	.819	.801	.796	.807	.830	.856	† .883	† .906	.919	.918	.906	.880	.861	.845	.842	.852	.873	.893	.902	.921	.936	.938	.937	.873
" 17, ...	.936	.923	.902	.895	.900	.921	.953	.993	30.011	30.023	30.017	.996	.978	.961	.942	.931	.934	.943	.958	.965	.979	.978	.966	.963	.957
" 18, ...	.956	.939	.939	.931	.945	.965	.983	30.013	.020	.020	.016	30.004	.986	.965	.948	.953	.965	.977	.995	30.017	30.037	30.041	30.031	30.030	.986
" 19, ...	30.013	.998	.984	.979	.982	.989	.998	.011	.022	.022	.003	29.983	.963	.945	.929	.919	.921	.934	.943	29.963	29.985	29.990	29.990	29.982	.977	
" 20, ...	29.964	.949	.944	.930	.932	.952	.985	.014	.013	.010	.015	.993	.950	.939	.903	.893	.879	.871	.856	.862	.888	.883	.872	.857	.832	
" 21, ...	.858	.850	.834	.828	.826	.837	.843	29.861	29.872	29.865	29.867	.850	.813	.790	.773	.755	.757	.756	.762	.766	.788	.790	.790	.791	.813
" 22, ...	.772	.758	.738	.736	.740	.751	.757	.779	.781	.783	.779	.763	.737	.721	.718	.708	.712	.712	.718	.725	.757	.771	.769	.760	.748
" 23, ...	.751	.739	† .727	† .724	* .725	* .730	* .735	* .745	* .749	.752	.734	.718	.708	.706	.683	.691	.705	.726	.744	.772	.803	.819	.826	.828	.743
" 24, ...	.824	.838	.822	.822	.838	.872	.870	.932	.933	.976	.968	.958	.956	.929	.926	.929	.939	.954	.955	.987	30.014	30.044	30.048	30.033	.933
" 25, ...	30.017	.993	.980	.956	.958	.970	30.006	30.029	30.038	30.063	30.052	30.038	.979	.980	.951	.984	.975	.979	.980	30.002	.037	.047	.067	.072	30.007	
" 26, ...	.036	30.023	30.000	.994	30.005	30.018	.039	.058	.057	.055	.046	.024	30.019	30.000	.991	.990	30.004	30.017	30.035	.052	.068	.084	.074	.065	.032
" 27, ...	.057	.028	.002	30.006	.021	.036	.057	.072	.082	.098	.093	.065	.057	.049	30.021	30.036	.024	.032	.036	.059	.087	.088	.085	.082	.053
" 28, ...	.071	.055	.026	.025	.028	.051	.036	.092	.096	.096	.072	.064	.047	.034	.016	.018	.024	.044	.049	.071	.087	.085	.080	.073	.057
" 29, ...	.072	.048	.036	.044	.040	.060	.078	.093	.107	.117	.111	.093	.069	.030	29.996	29.999	.003	.011	.031	.049	.064	.063	.052	.053	
" 30, ...	.011	29.980	29.949	29.948	29.948	29.954	29.973	29.989	29.990	29.985	29.978	29.946	29.919	29.893	29.877	.874	.883	29.892	29.909	29.911	29.907	29.903	29.888	29.934	
" 31, ...	29.879	.828	.831	.803	.820	.826	.842	.817	.817	.836	.830	.825	.809	.793	.767	.732	.737	.755	.753	.773	.806	.819	.822	.819	.808	
Hourly Means,		29.962	29.918	29.933	29.926	29.931	29.946	29.965	29.989	30.000	30.005	29.997	29.978	29.952	29.931	29.915	29.911	29.913	29.925	29.934	29.952	29.969	29.978	29.976	29.970	29.954

* Interpolated.

† Approximate.

TABLE II.

TEMPERATURE FOR THE MONTH OF MARCH, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means	Max.	Min.
Mar. 1,.....	56.4	56.6	57.0	57.5	57.4	57.0	57.0	57.1	56.9	57.5	57.4	58.6	61.0	59.3	59.3	59.9	59.2	58.8	58.7	58.9	59.2	59.6	59.8	59.8	58.3	62.1	55.5
" 2,.....	60.0	60.3	60.5	60.8	60.7	61.1	60.9	61.0	62.1	63.6	63.9	62.7	63.3	63.3	63.6	63.4	63.4	62.6	62.9	63.5	64.5	64.6	65.0	65.1	62.6	65.1	59.8
" 3,.....	65.3	64.5	64.7	64.3	63.8	64.5	64.3	64.6	65.9	65.8	67.9	68.5	69.3	66.8	67.6	66.7	65.3	62.7	60.9	61.1	61.2	61.4	61.3	61.2	64.6	69.7	60.9
" 4,.....	60.9	60.2	59.3	59.0	58.6	58.4	57.7	57.5	58.3	59.0	60.0	60.8	61.3	62.3	62.0	61.4	60.5	60.0	59.9	59.6	59.3	59.6	59.2	59.0	59.7	62.3	57.4
" 5,.....	58.5	57.9	57.4	56.5	56.5	56.0	55.9	56.1	56.4	56.6	56.9	57.6	58.7	59.1	59.7	59.0	59.1	57.8	57.2	56.9	57.1	57.4	57.3	57.1	57.4	59.8	55.9
" 6,.....	56.6	56.3	56.0	55.3	55.2	55.4	55.5	56.7	58.2	59.8	59.6	59.6	58.6	60.7	59.2	58.5	57.4	57.0	56.8	56.8	56.8	56.7	56.6	56.5	57.3	61.3	55.0
" 7,.....	56.5	56.4	56.4	56.4	56.5	56.2	56.3	57.0	56.5	57.9	59.7	60.6	60.1	60.3	60.1	59.6	59.5	59.4	59.4	59.4	59.4	59.4	60.0	60.1	58.5	61.0	56.1
" 8,.....	60.8	60.3	60.8	60.6	60.2	61.2	61.7	61.9	63.6	67.1	68.4	69.0	68.9	68.9	67.1	65.9	63.4	62.3	61.9	63.2	65.1	65.9	65.3	64.6	64.1	69.0	60.0
" 9,.....	63.7	63.0	61.9	61.7	61.2	61.6	61.6	61.8	61.7	61.8	63.5	66.0	66.6	66.3	65.5	65.2	64.3	63.0	62.6	61.9	62.0	61.7	62.1	62.3	63.0	66.6	61.2
" 10,.....	61.6	61.0	61.2	61.1	60.1	59.5	59.6	59.4	59.6	59.6	60.9	60.7	61.1	61.0	60.8	60.1	59.6	59.1	59.0	59.0	58.9	58.7	57.8	57.3	59.9	62.3	57.3
" 11,.....	57.0	57.0	56.3	56.6	56.5	56.4	56.7	57.7	59.3	59.5	59.8	60.2	60.2	59.7	58.7	58.8	59.1	58.2	58.1	59.0	59.3	59.6	58.4	57.2	58.3	60.8	56.3
" 12,.....	57.4	57.3	57.2	57.7	57.9	58.2	58.7	59.0	59.6	61.1	62.1	62.6	61.9	62.9	62.9	62.3	61.8	61.8	62.0	63.1	63.1	63.6	63.0	62.6	60.8	63.6	57.0
" 13,.....	62.5	62.2	62.1	62.8	62.4	62.3	62.7	63.9	65.5	67.7	69.5	71.3	72.8	71.8	72.9	70.7	68.6	66.9	66.2	66.2	66.0	65.7	65.7	65.8	66.4	73.1	62.1
" 14,.....	65.6	62.4	60.9	60.0	59.5	59.5	59.4	60.0	60.0	60.7	61.1	61.5	63.5	61.4	61.0	60.6	60.9	61.7	62.0	62.0	62.8	63.2	62.9	63.3	61.5	65.8	59.4
" 15,.....	62.8	62.7	63.0	63.0	63.1	63.1	63.1	63.3	63.8	64.6	64.6	64.6	65.1	65.8	66.4	69.5	68.1	66.0	65.3	65.6	65.6	65.6	65.7	65.9	64.8	69.5	62.6
" 16,.....	66.8	67.0	66.7	65.6	65.2	65.4	65.2	65.6	66.1	66.8	67.3	67.1	67.6	67.7	68.5	67.9	66.7	66.5	66.5	66.4	66.7	66.4	66.8	67.0	66.6	68.7	64.8
" 17,.....	66.7	66.2	66.3	65.6	65.0	64.8	64.8	65.0	66.8	69.2	70.0	70.6	70.6	69.6	68.6	68.2	66.1	64.4	63.7	63.9	64.2	64.2	64.1	64.3	66.4	71.2	63.3
" 18,.....	64.8	65.0	65.2	64.8	64.2	64.8	64.8	65.0	†65.0	†66.1	†68.5	68.5	65.7	66.6	68.5	68.6	68.6	66.3	64.9	64.1	64.0	64.0	64.9	65.3	65.9	69.6	63.8
" 19,.....	65.5	65.2	65.0	64.3	64.0	63.6	63.7	65.0	67.0	69.5	66.7	70.1	68.7	67.3	67.4	67.3	68.1	65.3	65.0	64.3	64.5	63.1	63.6	64.2	65.8	70.1	63.1
" 20,.....	63.4	62.7	62.6	62.4	61.2	60.9	60.5	61.0	61.5	62.5	62.3	64.5	65.4	64.6	64.9	64.4	63.8	63.1	63.0	63.9	64.3	64.4	64.3	63.2	65.7	60.4	
" 21,.....	64.4	63.8	63.7	63.3	63.8	63.9	64.2	65.6	67.5	68.5	69.6	70.0	70.5	69.6	69.2	68.8	67.4	66.3	65.9	65.7	65.6	65.7	65.6	66.4	70.5	63.3	
" 22,.....	65.5	65.2	65.5	65.8	65.7	65.4	65.7	66.5	67.3	68.3	69.6	69.6	70.4	72.0	70.8	70.8	68.4	68.0	67.8	67.7	68.2	67.7	67.8	68.0	67.8	72.1	65.1
" 23,.....	68.7	68.7	69.2	69.3	69.9	69.1	69.9	72.9	73.8	75.1	75.6	74.6	74.0	75.1	74.3	72.6	69.7	67.4	65.4	64.8	64.7	64.7	64.8	70.3	76.3	64.2	
" 24,.....	63.2	60.6	60.3	60.6	*58.9	*59.2	*58.6	*57.8	*58.3	56.6	57.3	57.1	56.6	56.6	55.5	54.9	55.5	54.8	55.0	54.5	54.7	54.6	52.7	53.5	57.0	64.8	52.7
" 25,.....	53.4	53.5	53.5	54.1	54.3	54.4	53.4	*53.7	*53.9	54.2	54.3	53.7	54.8	53.7	53.6	53.8	52.7	52.4	52.8	53.4	53.6	53.5	53.4	52.9	53.6	54.9	52.4
" 26,.....	52.8	52.6	52.3	52.4	52.1	52.1	52.0	53.4	53.7	55.6	57.6	58.4	57.8	57.8	57.3	56.5	55.8	54.9	54.3	54.4	54.6	53.4	53.5	54.0	54.6	58.7	52.0
" 27,.....	54.2	55.0	55.4	55.9	55.7	55.7	56.1	56.3	58.2	58.6	58.3	56.6	57.1	57.5	58.2	57.8	57.8	57.5	55.6	56.4	55.7	55.3	55.4	56.6	58.6	54.0	
" 28,.....	55.5	55.2	55.2	55.3	55.4	55.6	56.0	56.9	58.4	60.0	60.1	60.6	59.9	59.6	59.7	59.5	59.2	59.2	58.9	58.7	58.3	58.3	58.6	58.1	61.1	55.2	
" 29,.....	59.6	59.2	59.1	59.3	58.9	59.1	59.7	60.0	61.3	61.6	61.9	62.6	62.5	61.4	60.4	60.3	60.4	60.2	60.4	60.7	61.1	61.3	60.4	62.6	59.6	62.6	58.9
" 30,.....	60.4	60.5	60.6	60.7	60.7	60.7	61.0	61.5	62.1	62.6	66.5	65.0	64.5	63.9	63.8	64.0	64.0	64.0	63.9	64.0	63.6	63.7	63.7	62.9	67.0	60.3	
" 31,.....	63.3	63.4	64.0	63.9	63.5	63.7	63.9	64.2	64.7	65.6	66.1	72.7	72.6	72.6	72.9	73.5	73.0	68.4	68.0	68.1	68.0	69.7	69.9	69.8	67.7	74.0	63.3
Hourly Means,	61.1	60.7	60.6	60.5	60.2	60.3	60.3	60.9	61.8	62.8	63.2	64.0	64.4	64.1	63.9	63.6	62.9	61.9	61.5	61.5	61.7	61.7	61.6	61.6	61.9	65.7	59.1

† Approximate.

* Interpolated.

TABLE III.

TEMPERATURE OF EVAPORATION AND RADIATION, FOR THE MONTH OF MARCH, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.	Sun.	Rad.	
Mar. 1,.....	54.6	54.4	54.6	55.2	54.7	54.7	54.9	55.3	55.9	56.5	56.6	57.5	59.8	58.1	58.4	58.6	58.6	58.6	58.4	58.7	58.8	59.5	59.7	59.8	57.2	129.8	54.4	
" 2,.....	59.9	60.3	60.5	60.8	60.7	61.1	60.9	60.9	61.9	62.6	63.1	62.6	63.0	62.7	63.5	63.4	63.4	62.6	62.9	63.5	64.5	64.6	65.0	65.1	62.5	125.3	59.0	
" 3,.....	65.3	64.3	64.5	64.2	63.4	64.3	64.1	64.3	65.4	64.6	66.0	66.4	66.8	65.1	64.9	64.5	64.2	62.7	60.9	61.1	61.2	61.4	61.3	61.2	63.8	127.1	60.4	
" 4,.....	60.6	59.8	58.5	58.3	57.9	57.5	57.2	57.2	57.6	58.2	58.3	58.5	58.5	59.3	59.3	58.6	57.7	57.3	57.4	56.8	56.8	57.6	57.0	56.6	58.0	112.7	58.7	
" 5,.....	56.4	55.7	55.3	55.0	54.9	54.6	54.8	55.2	54.9	55.5	55.6	55.5	55.5	55.7	55.9	54.8	54.8	53.8	53.2	52.8	53.6	53.8	53.4	53.3	54.7	74.0	55.7	
" 6,.....	53.0	52.5	52.4	51.7	52.1	52.4	52.5	53.5	54.2	55.2	55.2	55.7	55.4	55.8	55.5	55.2	54.4	53.4	52.9	52.7	52.6	52.9	52.3	52.4	53.6	118.6	54.7	
" 7,.....	51.8	51.9	51.3	51.1	51.2	51.2	51.7	52.1	52.2	52.9	54.0	54.6	54.4	54.4	54.9	55.4	54.6	54.5	54.6	54.8	55.0	55.2	53.5	120.7	55.7			
" 8,.....	55.8	56.2	56.9	57.1	56.5	57.0	56.9	57.8	58.8	60.7	62.1	62.9	63.0	63.1	62.2	61.8	60.1	59.1	58.6	59.4	60.4	60.8	60.7	60.4	59.5	124.3	57.7	
" 9,.....	60.2	59.8	58.5	59.1	59.2	59.3	59.6	59.9	60.5	61.0	62.2	63.5	63.5	63.4	62.6	62.8	62.5	61.3	61.7	61.5	62.0	61.7	62.1	61.3	127.4	60.5		
" 10,.....	61.3	60.6	60.5	60.6	59.3	58.5	58.6	58.3	58.6	58.4	58.3	58.2	57.6	57.1	57.3	56.8	56.7	56.7	56.8	56.9	57.0	56.8	56.4	56.0	58.1	108.7	58.2	
" 11,.....	55.5	55.1	54.8	54.2	53.8	53.9	53.9	54.1	54.1	54.4	54.6	54.9	54.9	54.4	54.8	54.4	54.6	55.3	56.0	56.8	57.4	57.7	57.5	57.2	55.6	55.3	129.5	56.5
" 12,.....	55.2	55.3	55.3	55.8	56.0	56.2	56.3	56.6	57.1	58.0	58.3	59.0	59.2	59.8	60.3	60.2	59.9	60.2	60.7	61.9	61.9	62.3	62.0	61.8	58.7	128.8	55.2	
" 13,.....	61.5	61.4	61.6	62.5	61.9	61.6	62.3	62.7	63.8	64.9	65.5	66.4	67.6	66.9	67.7	66.7	65.7	65.1	65.0	65.2	65.0	64.7	64.8	65.0	64.4	132.4	61.4	
" 14,.....	61.9	61.7	60.1	59.2	58.7	58.6	58.3	58.8	58.9	59.5	59.6	59.7	60.5	59.6	59.9	59.8	60.1	61.0	61.3	61.4	62.2	62.3	62.0	62.5	60.4	116.3	58.6	
" 15,.....	61.9	61.8	62.4	62.4	62.4	62.5	62.5	62.9	63.4	63.9	64.2	64.4	64.9	65.3	66.0	67.5	66.8	65.9	65.3	65.6	65.6	65.6	65.7	65.8	64.4	122.1	61.4	
" 16,.....	66.7	66.7	66.5	65.5	65.2	65.4	65.2	65.6	66.1	66.7	66.6	66.6	67.2	67.0	67.5	67.3	66.7	66.1	66.1	66.0	66.7	66.2	66.4	66.4	66.3	122.5	64.7	
" 17,.....	65.8	65.4	65.5	64.7	63.9	64.2	64.3	64.3	65.6	66.7	67.1	67.5	67.4	66.7	66.1	65.8	65.1	64.4	63.7	63.9	64.2	64.2	64.0	64.1	65.2	129.3	61.5	
" 18,.....	64.7	64.9	64.9	64.4	64.0	64.6	64.6	64.7	65.1	67.1	66.0	64.6	64.6	66.1	65.4	65.6	64.8	64.2	63.3	63.1	62.9	63.9	63.5	64.4	64.7	64.7	125.7	62.6
" 19,.....	64.8	64.5	64.4	63.8	63.4	62.9	63.1	64.0	65.4	66.9	64.6	66.7	65.3	64.6	64.7	65.0	66.0	65.1	65.0	65.0	64.2	64.5	63.1	63.6	64.0	64.6	127.8	59.8
" 20,.....	62.8	62.0	61.7	61.3	60.2	59.9	59.4	59.5	59.4	59.9	59.8	61.2	61.4	61.3	61.0	61.1	60.7	60.5	60.0	61.0	61.7	61.7	61.6	61.5	60.9	128.8	59.5	
" 21,.....	61.2	61.1	60.8	60.9	61.3	61.4	61.3	62.0	63.1	63.7	64.3	64.5	64.5	64.5	64.4	65.4	64.4	63.4	63.0	63.4	64.0	64.5	64.4	64.5	63.2	132.3	61.3	
" 22,.....	64.0	63.6	63.7	64.0	64.2	64.3	64.5	65.4	66.1	66.8	67.5	67.5	67.8	68.6	68.5	68.2	67.1	66.6	66.7	67.4	67.4	67.1	67.3	67.6	66.3	129.7	64.0	
" 23,.....	68.4	68.4	68.8	68.8	68.4	68.5	69.2	70.6	70.9	71.3	71.6	71.3	70.7	71.3	71.6	70.8	69.8	68.5	66.3	63.9	62.7	62.8	62.7	62.8	68.3	124.0	63.0	
" 24,.....	60.7	59.0	59.6	58.8	56.7	56.9	56.2	55.1	55.8	53.9	53.9	54.5	53.6	54.3	53.2	52.7	53.3	52.2	52.5	51.8	52.4	51.9	51.4	51.4	54.7	66.6	52.6	
" 25,.....	50.8	50.2	50.2	50.8	51.5	51.7	50.7	*50.9	*51.2	51.4	51.4	50.9	51.7	50.9	50.5	50.7	50.1	50.0	50.8	51.1	51.3	51.6	51.5	51.1	50.9	80.1	50.7	
" 26,.....	50.7	50.1	49.4	49.2	*48.9	*49.0	*48.9	*50.2	*50.5	52.0	53.5	54.0	53.7	53.7	53.5	52.6	52.7	52.1	52.0	52.2	52.3	52.3	52.2	51.6	102.1	51.1		
" 27,.....	52.1	*53.0	*53.0	*53.2	*53.3	*53.3	*53.3	*53.6	*53.6	53.6	53.6	53.0	52.0	52.5	52.6	51.9	52.3	53.0	52.8	53.2	54.4	54.6	54.3	54.3	53.2	87.7	53.6	
" 28,.....	54.4	54.2	54.0	54.0	53.9	54.1	54.9	55.6	56.7	57.0	56.6	56.3	55.6	55.7	55.5	55.9	56.4	56.7	56.5	56.3	56.4	56.4	56.4	56.4	55.6	120.9	53.7	
" 29,.....	56.2	55.7	55.2	55.7	56.0	56.1	55.2	+55.7	+56.7	56.8	56.5	57.5	56.9	56.6	56.5	56.8	56.8	56.7	56.6	57.3	57.6	57.6	57.7	56.6	114.3	57.0		
" 30,.....	57.5	57.4	57.6	57.9	58.0	58.1	58.2	58.2	58.6	59.4	59.5	60.9	62.0	61.3	60.8	60.8	60.9	61.1	61.5	61.4	61.4	62.0	62.4	62.7	60.0	126.9	58.8	
" 31,.....	62.5	62.8	63.3	63.2	62.9	63.4	63.6	64.1	65.0	65.3	70.1	70.3	70.3	70.5	70.4	70.3	65.9	65.0	64.7	65.0	66.5	67.5	68.0	66.0	116.3	62.2		
Hourly Means,	59.4	59.0	58.9	58.8	58.5	58.6	58.6	59.0	59.6	60.1	60.3	60.9	61.0	60.8	60.8	60.7	60.4	59.8	59.6	59.7	60.0	60.1	60.1	60.1	59.8	117.2	58.2	

* Interpolated.

† Approximate.

TABLE IV.

TABLE IV.
AN HOURLY AND DAILY RELATIVE HUMIDITY AND TENSION OF AQUEOUS VAPOUR
FOR THE MONTH OF MARCH, 1886.

HOUR.	HOURLY MEAN.		DATE.	DAILY MEAN.	
	Humidity.	Tension.		Humidity.	Tension.
1 a	90	0.493	1886.		
2 "	90	0.486	Mar. 1,.....	94	0.455
3 "	90	0.483	" 2,.....	100	0.566
4 "	90	0.482	" 3,.....	96	0.583
5 "	90	0.477	" 4,.....	90	0.461
6 "	90	0.478	" 5,.....	83	0.394
7 "	90	0.478	" 6,.....	77	0.364
8 "	88	0.483	" 7,.....	70	0.345
9 "	88	0.490	" 8,.....	75	0.449
10 "	85	0.492	" 9,.....	91	0.521
11 "	83	0.493	" 10,.....	89	0.461
Noon.	84	0.503	" 11,.....	81	0.399
1 p	81	0.496	" 12,.....	88	0.468
2 "	82	0.498	" 13,.....	89	0.579
3 "	84	0.500	" 14,.....	94	0.512
4 "	84	0.501	" 15,.....	97	0.601
5 "	86	0.501	" 16,.....	98	0.643
6 "	89	0.495	" 17,.....	94	0.607
7 "	89	0.494	" 18,.....	94	0.596
8 "	90	0.497	" 19,.....	94	0.594
9 "	90	0.504	" 20,.....	87	0.505
10 "	91	0.507	" 21,.....	83	0.538
11 "	91	0.508	" 22,.....	92	0.628
Midt.	91	0.508	" 23,.....	90	0.667
			" 24,.....	85	0.400
			" 25,.....	82	0.338
			" 26,.....	80	0.344
			" 27,.....	78	0.361
			" 28,.....	85	0.411
			" 29,.....	77	0.408
			" 30,.....	83	0.480
			" 31,.....	91	0.618
Mean,	88	0.494	Mean,.....	87	0.493

TABLE V.
DURATION OF SUNSHINE.

TABLE VI.
RAINFALL FOR THE MONTH OF MARCH, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Sums.	
Mar. 1,	
" 2,	0·005	...	...	...	...	...	...	...	...	...	...	...	...	0·005	
" 3,	
" 4,	
" 5,	
" 6,	
" 7,	
" 8,	
" 9,	
" 10,	0·005	...	...	...	...	...	...	...	...	...	...	...	...	0·005	
" 11,	0·010	
" 12,	
" 13,	
" 14,	0·675	0·015	0·010	0·700
" 15,	0·100	0·160	0·085	0·015	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·360	
" 16,	0·005	
" 17,	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·010	
" 18,	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·005	
" 19,	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·005	
" 20,	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·005	
" 21,	
" 22,	
" 23,	0·005	0·095	0·070	...	...	...	...	...	...	...	...	0·170	
" 24,	0·015	0·140	0·060	...	...	...	...	...	0·015	0·030	...	...	...	...	0·050	0·055	0·015	0·020	0·010	0·170	0·315	0·065	...	0·960	
" 25,	0·010	...	...	...	...	...	0·020	...	0·005	...	...	...	...	...	...	...	0·005	0·025	0·025	0·045	...	0·110	...	...
" 26,	0·005	...	...	...	...	0·030	...	
" 27,	0·080	0·005	...	...	...	...	...	0·015	0·005	0·015	0·040	...	0·005	...	...	0·165		
" 28,	0·005	0·005	...	...	...	...	...	...	...	...	...	...	...	...	0·005	0·005	...	...	...	...	...	...	...	0·010	
" 29,	0·005	0·005	...	...	...	...	...	...	...	0·010		
" 30,	
" 31,	0·005	0·005	0·015	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·025
Sums,.....	0·035	0·150	0·075	...	0·120	0·170	0·090	0·015	...	0·035	0·110	0·005	...	...	0·680	0·025	0·145	0·125	0·040	0·025	0·030	0·240	0·360	0·115	2·590

TABLE VII.

DIRECTION AND VELOCITY OF THE WIND, FOR THE MONTH OF MARCH, 1886.

(31)

TABLE VIII.

MEAN HOURLY COMPONENTS AND MEAN DIRECTION OF THE WIND, FOR MARCH, 1886.

Hour.	Components (miles per hour).						Direction
	N	E	S	W	+ N-S	+ E-W	
1 a.	2.0	13.5	0.2	0.0	+ 1.8	+ 13.5	E 8° N
2 "	1.9	13.7	0.3	0.3	1.6	13.5	E 7° N
3 "	1.8	13.5	0.5	0.0	1.2	13.5	E 5° N
4 "	1.2	14.2	0.3	0.0	0.9	14.1	E 4° N
5 "	1.4	15.6	0.3	0.1	1.1	15.5	E 4° N
6 "	1.5	15.1	0.1	0.0	1.5	15.1	E 6° N
7 "	1.4	16.0	0.1	0.0	1.2	16.0	E 4° N
8 "	0.8	16.4	0.5	0.0	0.4	16.4	E 4° N
9 "	1.6	16.2	0.5	0.0	1.1	16.2	E 4° N
10 "	1.6	16.5	0.4	0.1	1.2	16.4	E 4° N
11 "	1.4	17.0	0.6	0.0	0.0	16.2	E
Noon.	1.1	16.2	1.1	0.0	0.6	15.4	E 2° N
1 p.	1.6	15.8	1.0	0.4	0.2	14.6	E 1° N
2 "	1.2	15.1	1.0	0.5	0.2	14.4	E 1° N
3 "	1.5	14.5	1.4	0.1	0.2	14.7	E 3° N
4 "	1.1	14.7	1.0	0.0	0.1	14.7	E 3° N
5 "	1.5	14.6	0.8	0.4	0.7	14.3	E 8° N
6 "	1.9	13.1	0.2	0.7	1.8	12.4	E 8° N
7 "	2.0	13.3	0.2	0.6	1.8	12.7	E 8° N
8 "	1.9	12.3	0.0	0.8	1.9	11.5	E 10° N
9 "	1.7	11.5	0.2	0.6	1.6	10.8	E 9° N
10 "	1.4	12.6	0.3	0.5	1.1	12.1	E 5° N
11 "	1.8	12.0	0.5	0.2	1.3	11.8	E 6° N
Midt.	2.0	12.0	0.5	0.0	1.5	12.0	E 7° N
Mean,.....	1.6	14.4	0.5	0.2	+ 1.1	+ 14.2	E 5° N

TABLE IX.

DIRECTION AND FORCE OF THE WIND AT VICTORIA PEAK, AND SEA DISTURBANCE.

DATE.	4 a.			10 a.			4 p.			10 p.	
	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.
1886.											
March 1,.....	2	SE	6	2	SE	5	2	SE	5
" 2,.....	0	SE	4	0	SSE	3	0	SW	4
" 3,.....	0	S	4	0	S	3	0	S	3
" 4,.....	1	E	5	3	E	4	2	E	5
" 5,.....	1	E	5	3	E	5	3	E	6
" 6,.....	2	E	6	3	E	6	3	E	7
" 7,.....	4	E	7	5	E	4	1	E	3
" 8,.....	2	E	5	2	E	4	1	SW	4
" 9,.....	1	SE	5	1	S	6	3	EE	5
" 10,.....	3	E	7	3	E	5	3	EE	5
" 11,.....	4	E	6	4	E	5	3	EE	5
" 12,.....	3	SE	6	3	S	5	2	SS	4
" 13,.....	0	SE	3	0	S	3	0	SE	6
" 14,.....	0	E	5	2	S	4	1	SS	4
" 15,.....	1	S	4	1	S	4	0	SS	4
" 16,.....	0	SSW	3	0	SE	3	0	SS	4
" 17,.....	0	S	3	0	E	4	0	SS	4
" 18,.....	0	SE	3	0	S	3	0	SS	4
" 19,.....	0	SE	3	0	SE	3	0	SS	4
" 20,.....	4	E	5	3	E	4	2	SE	5
" 21,.....	1	SE	4	1	SE	4	0	SE	5
" 22,.....	0	SE	6	0	S	5	0	SE	5
" 23,.....	0	SE	6	1	SSW	6	1	SW	5
" 24,.....	2	ENE	4	3	NE	5	3	NE	5
" 25,.....	4	NE	5	4	NE	4	2	E	5
" 26,.....	3	NE	4	3	NE	5	2	E	4
" 27,.....	3	E	5	4	E	5	2	E	4
" 28,.....	4	E	4	4	E	6	3	E	5
" 29,.....	3	E	6	3	E	6	3	SE	5
" 30,.....	4	SE	5	3	SE	4	3	SE	6
" 31,.....	2	S	6	1	S	6	2	S	6
Mean,.....	1.7	E 23° S	4.8	2.1	E 28° S	4.5	1.6	E 38° S	4.7

TABLE X.
VICTORIA PEAK.

DATE.	BAROMETER.			TEMPERATURE.							
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	Sun.	Max.	Min.	Rad.	
1886.	ins.	ins.	ins.	°	°	°	°	°	°	°	°
1,.....	28.204	28.116	28.124	56.4	61.0	59.2	105.0	61.2	50.8	50.3	
2,.....	.213	.139	.188	61.6	63.8	62.8	129.0	66.9	55.2	51.3	
3,.....	.260	.224	.230	63.2	64.6	60.0	127.0	66.1	55.8	55.3	
4,.....	.277	.226	.265	61.6	62.4	58.2	117.4	62.6	55.8	52.3	
5,.....	.316	.283	.345	56.6	57.6	56.0	80.2	58.4	53.8	48.3	
6,.....	.286	.237	.237	59.2	60.6	57.2	126.0	62.2	48.9	48.9	
7,.....	.276	.257	.253	57.8	61.4	57.0	119.4	62.3	49.9	52.3	
8,.....	.305	.239	.234	58.4	62.6	61.0	132.0	63.8	53.8	53.3	
9,.....	.296	.226	.246	61.4	64.4	63.0	126.4	65.1	52.8	52.3	
10,.....	.313	.252	.253	58.6	57.0	53.8	98.0	63.2	47.8	47.8	
11,.....	.296	.217	.228	55.2	56.2	54.2	132.2	58.3	50.8	51.3	
12,.....	.273	.160	.185	59.6	61.6	60.6	131.0	63.9	53.8	51.3	
13,.....	.203	.142	.157	65.2	66.0	62.4	138.0	66.7	59.8	59.3	
14,.....	.173	.087	.062	62.7	62.8	60.8	128.0	65.7	60.2	60.7	
15,.....	.123	.053	.063	64.4	65.4	64.6	124.0	67.1	59.9	60.3	
16,.....	.190	.128	.144	66.2	67.6	65.6	117.0	67.8	61.0	61.7	
17,.....	.249	.216	.242	65.8	68.4	65.2	120.0	68.6	61.4	61.3	
18,.....	.271	.218	.228	66.6	68.2	66.6	127.0	68.8	60.0	60.3	
19,.....	.271	.193	.190	67.0	68.4	65.6	131.0	68.6	58.9	51.3	
20,.....	.221	.160	.102	61.4	62.6	61.4	114.1	65.8	59.8	55.3	
21,.....	.132	.051	28.029	62.6	66.6	62.6	131.0	68.8	61.4	61.3	
22,.....	.064	28.010	27.983	64.6	67.6	65.6	124.0	68.3	62.6	63.3	
23,.....	.038	27.986	28.070	67.2	67.0	63.6	103.0	67.8	62.8	53.3	
24,.....	.183	28.131	.174	61.0	58.2	54.4	69.6	61.0	51.8	45.3	
25,.....	.234	.181	.204	53.6	52.6	50.8	88.0	54.6	49.9	45.3	
26,.....	.247	.205	.263	51.4	51.2	49.6	97.0	52.9	49.6	47.3	
27,.....	.291	.240	.251	51.6	50.2	49.0	84.0	52.1	47.8	48.3	
28,.....	.288	.233	.216	51.6	52.6	51.0	88.0	53.1	49.0	50.3	
29,.....	.312	.215	.223	53.0	53.2	52.0	107.0	54.9	50.8	51.3	
30,.....	.211	.124	.133	54.8	58.6	60.2	119.0	61.9	50.2	52.3	
31,.....	.103	.059	.027	63.6	65.8	62.6	91.6	66.0	57.8	50.3	
Mean,.....	28.230	28.168	28.179	60.1	61.5	59.2	113.7	63.1	55.0	53.3	

TABLE XI.
HUMIDITY AT THE OBSERVATORY AND AT VICTORIA PEAK.

DATE.	RELATIVE HUMIDITY.						TENSION OF AQUEOUS VAPOUR.					
	OBSERVATORY.			VICTORIA PEAK.			OBSERVATORY.			VICTORIA PEAK.		
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.
1886.	94	92	100	94	97	97	0.445	0.477	0.509	0.434	0.526	0.493
1,.....	95	100	100	100	98	98	.556	.585	.611	.550	.588	.567
2,.....	94	88	100	97	95	97	.594	.579	.546	.569	.578	.508
3,.....	95	84	88	94	91	84	.476	.457	.450	.518	.514	.412
4,.....	94	75	78	98	92	91	.428	.375	.368	.455	.442	.411
5,.....	73	80	76	81	69	57	.376	.394	.351	.411	.371	.265
6,.....	70	75	73	75	67	74	.336	.385	.370	.364	.372	.349
7,.....	67	79	73	88	94	96	.448	.499	.466	.438	.538	.520
8,.....	95	87	100	96	92	92	.527	.541	.551	.528	.560	.582
9,.....	93	80	88	100	92	73	.475	.420	.439	.494	.433	.304
10,.....	71	75	88	84	85	77	.363	.372	.447	.369	.384	.325
11,.....	82	89	93	94	94	94	.443	.495	.546	.482	.518	.500
12,.....	86	80	95	86	88	94	.579	.603	.599	.538	.567	.540
13,.....	93	95	94	93	98	98	.494	.506	.551	.537	.567	.529
14,.....	96	90	100	96	97	98	.586	.648	.632	.587	.615	.604
15,.....	100	97	99	97	95	95	.655	.662	.642	.631	.643	.599
16,.....	87	87	100	93	87	95	.623	.604	.602	.596	.611	.590
17,.....	87	87	97	90	87	87	.607	.580	.580	.586	.607	.573
18,.....	87	88	100	96	92	92	.626	.588	.579	.643	.646	.585
19,.....	86	79	86	91	91	83	.483	.489	.517	.503	.518	.459
20,.....	76	82	94	94	90	89	.527	.582	.592	.538	.586	.506
21,.....	92	88	97	100	85	95	.639	.656	.657	.611	.581	.598
22,.....	82	84	89	97	100	84	.717	.708	.548	.655	.664	.494
23,.....	83	86	82	89	85	87	.382	.370	.352	.477	.415	.376
24,.....	81	80	87	87	82	91	.344	.331	.359	.359	.330	.342
25,.....	78	75	93	90	95	93	.342	.346	.379	.344	.362	.331
26,.....	70	64	94	93	90	96	.347	.310	.414	.358	.329	.338
27,.....	80	76	87	97	94	98	.418	.389	.428	.373	.377	.370
28,.....	73	79	80	94	96	93	.400	.417	.430	.383	.394	.363
29,.....	82	84	92	98	94	96	.466	.493	.536	.426	.465	.505
30,.....	97	86	84	100	93	94	.611	.704	.609	.591	.596	.538
Mean,.....	85	84	91	93	90	90	0.494	0.502	0.505	0.495	0.506	0.465

TABLE XII.

AMOUNT AND CLASSIFICATION OF CLOUDS AND DIRECTION WHENCE COMING.

DATE.	1 a.			4 a.			7 a.			10 a.		
	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction
1886.												
March 1,	*10	nim.	...	9	cum-nim.	E	10	cum-nim.	E	10	nim.	E
" 2, .....	...	fog.	...	...	fog.	...	10	cum-nim.	...	7	cum.	SS
" 3, .....	...	fog.	...	...	fog.	...	...	fog.	...	10	cum.	SW
" 4,	10	str.	...	7	cum.	ESE	10	cum-nim.	...	10	nim.	E
" 5,	10	cum-nim.	...	10	cum-nim.	E	10	nim.	...	10	cum-nim.	E
" 6,	10	str.	...	10	str.	E	10	str.	...	10	sm-cum.	W
" 7,	*8	R-cum.	E	6	R-cum.	E	10	R-cum.	ESE	10	sm-cum.	W
" 8,	10	cum.	SSE	10	cum-nim.	...	10	cum.	...	10	cum.	SI
" 9,	9	cum.	SSE	5	cum-nim.	SE	9	cum.	SE	10	cum-nim.	SI
" 10, .....	...	fog.	...	8	nim.	E	10	cum-nim.	...	10	nim.	E
" 11,	10	nim.	...	10	nim.	E	8	cum.	S	6	R-cum.	S
" 12,	10	cum-nim.	...	10	R-cum.	E	10	cum-nim.	...	10	cum.	WS
" 13, .....	...	fog.	...	...	fog.	...	10	cum.	S	10	cum.	W
" 14,	*6	cum.	...	10	cum-nim.	...	10	cum.	...	10	cum-nim.	...
" 15,	*10	nim.	S	10	nim.	S	10	nim.	...	10	cum-nim.	...
" 16,	9	cum.	S	...	fog.	...	10	cum.	...	10	cum.	E
" 17,	8	e-str. cum.	...	...	fog.	...	10	cum.	...	10	fog.	WS
" 18, .....	...	fog.	...	...	fog.	...	10	cum.	...	8	e-str.	...
" 19,	10	cum.	SE	...	fog.	...	0	...	...	1	cum.	...
" 20,	10	str.	...	...	fog.	...	10	nim.	...	10	cum-nim.	E
" 21,	10	cum.	SE	10	cum.	SSE	10	cum.	SSE	7	sm-cum.	W
" 22,	10	cum.	SE	10	cum.	SE	9	cum.	SE	2	cum.	SI
" 23,	10	cum.	S	...	fog.	...	10	cum-nim.	S	9	cum.	S
" 24,	10	nim.	...	10	nim.	NE	10	cum-nim.	...	10	nim.	...
" 25,	10	nim.	...	10	nim.	NE	10	cum-nim.	NNE	10	nim.	NN
" 26,	10	nim.	...	10	nim.	N	10	nim.	...	10	str.	...
" 27,	10	cum-nim.	...	10	nim.	E	10	cum-nim.	...	10	str.	E
" 28,	10	nim.	...	10	nim.	E	10	cum-nim.	...	10	R-cum.	EN
" 29,	10	cum-nim.	...	10	nim.	E	10	cum-nim.	SW	10	cum.	SI
" 30,	8	cum.	ESE	6	nim.	ESE	10	cum-nim.	E	10	R-cum.	ES
" 31,	10	nim.	...	10	nim.	...	10	nim.	SE	10	cum.	SI
Mean,.....	9.5	...	...	9.1	...	...	9.5	...	...	9.0	...	...

* Interpolated.

TABLE XII.—*Continued.*

AMOUNT AND CLASSIFICATION OF CLOUDS AND DIRECTION WHENCE COMING.

E.	1 p.			4 p.			7 p.			10 p.			Daily and Monthly Means.
	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	
6.													
1,.....	10	cum-nim.	E	9	cum.	SW	10	nim.	E	...	fog.	...	9.7
2,.....	10	cum. fog.	SW E	...	cum-nim. fog.	SSE	...	fog.	...	...	fog.	...	9.0
3,.....	10	R-cum.	SW	10	R-cum.	SSW	...	fog.	...	...	fog.	...	10.0
4,.....	10	cum. cum-nim.	SW E	10	R-cum.	N	10	cum.	...	10	cum-nim.	...	9.6
5,.....	10	cum-nim.	E	10	cum-nim.	...	10	str.	...	10	str.	...	10.0
6,.....	10	cum. cum.	SW E	10	sm-cum. cum.	WSW	10	cum. cum.	WSW	10	cum.	E	10.0
7,.....	10	R-cum.	ESE	10	cum-nim.	ESE	10	cum.	...	10	cum.	...	9.2
8,.....	10	cum. cum.	SE ESE	10	cum. cum. c-cum.	SE	10	cum.	SE	10	cum.	SSE	10.0
9,.....	7	cum.	S	6	sm-cum. cum.	ESE NW	0	...	...	...	fog.	...	6.6
10,.....	10	cum. cum.	SSE E	7	cum. cum.	NNW	10	cum.	E	10	nim.	...	9.3
11,.....	10	cum-nim. cum.	S	4	R-cum. cum.	SSW	10	cum-nim.	E	10	nim.	...	8.5
12,.....	8	cum-nim. sm-cum.	W	10	cum-nim. sm-cum.	E W	10	cum-nim.	SSE	10	str.	...	9.8
13,.....	4	cum. cum.	SSW SW	9	cum. cum.	S	10	cum.	W	2	cum.	W	7.5
14,.....	10	cum-nim.	ESE	10	cum. nim. c-cum.	WSW SE W	10	nim.	...	10	cum-nim.	S	9.5
15,.....	...	fog. cum.	S	4	cum. c-str.	S W	10	cum.	S	...	fog.	...	9.0
16,.....	10	cum-nim. fog. c-str.	E	8	cum. cum.	S S	...	fog.	...	5	e-cum.	WSW	8.7
17,.....	10	cum. c-str.	WSW	10	c-str.	WSW	...	fog.	...	...	fog.	...	9.6
18,.....	10	sm-cum. cum.	W	10	c-str.	W	10	c-str.	...	7	e-cum. cum.	SW S	9.2
19,.....	4	cum. cum.	SSW	0	...	...	...	fog.	...	...	fog.	...	3.0
20,.....	8	cum. cum-nim.	SSE E	10	R-cum.	SE	10	cum.	SE	10	cum.	SE	9.7
21,.....	5	cum.	S	6	cum. cum.	S SE	10	cum.	SSE	10	str.	...	8.5
22,.....	7	cum.	SE	10	cum. cum.	SSW S	10	cum.	S	10	cum.	SW	8.5
23,.....	10	cum-nim.	SSW	10	cum-nim.	SW	10	nim.	...	10	str.	...	9.9
24,.....	10	nim.	...	10	cum-nim.	NNE	10	nim.	...	10	nim.	...	10.0
25,.....	10	cum-nim.	NNE	10	str. nim.	N	10	nim.	...	10	nim.	...	10.0
26,.....	10	str. cum-nim.	NE	10	str. cum-nim.	NNE	10	cum-nim.	NNE	10	nim.	...	10.0
27,.....	10	str.	...	10	str.	...	10	nim.	...	10	nim.	...	10.0
28,.....	10	R-cum. cum-nim.	NE	10	R-cum.	ENE	10	cum-nim.	...	10	cum-nim.	...	10.0
29,.....	10	cum. nim.	SW E	10	cum. nim.	WSW SE	10	nim.	...	10	cum-nim.	...	10.0
30,.....	10	sm-cum. cum.	WSW SW	10	str. cum-nim.	SE	10	cum-nim.	SE	10	str.	...	9.2
31,.....	10	cum-nim. cum-nim.	E	10	cum-nim.	S	0	...	...	8	cum.	SW	8.5
cau,.....	9.1	...	...	8.8	...	...	9.2	...	...	9.3	...	...	9.2

TABLE XIII.
RAINFALL AT DIFFERENT STATIONS.

DATE.	OBSERVATORY.		STONE CUTTERS' ISLAND.		VICTORIA PE	
	Amount.	Duration.	Amount.		Amount.	
1886.	ins.	hrs.	ins.		ins.	
March. 1,.....	...	5	...		...
,, 2,.....	0.005	...	...		...
,, 3,.....	...	...	...		...
,, 4,.....	...	3	...		...
,, 5,.....	...	...	...		...
,, 6,.....	...	...	...		...
,, 7,.....	...	...	...		...
,, 8,.....	...	...	...		...
,, 9,.....	0.005	2	...		...
,, 10,.....	...	2	...		...
,, 11,.....	0.010	3	...		...
,, 12,.....	...	...	...		...
,, 13,.....	...	...	...		...
,, 14,.....	1.060	8	...		1.15	
,, 15,.....	...	...	...		...
,, 16,.....	0.010	...	...		...
,, 17,.....	0.010	...	...		...
,, 18,.....	0.005	...	...		...
,, 19,.....	0.005	...	...		...
,, 20,.....	...	...	...		...
,, 21,.....	...	...	...		...
,, 22,.....	...	...	...		0.60	
,, 23,.....	0.400	7	0.54		...	
,, 24,.....	0.740	10	0.45		0.80	
,, 25,.....	0.125	8	0.11		0.35	
,, 26,.....	0.005	4	...		0.15	
,, 27,.....	0.175	6	0.16		0.20	
,, 28,.....	...	3	...		...
,, 29,.....	0.010	5	...		...
,, 30,.....	0.025	5	...		...
,, 31,.....	...	1	...		...
Total,.....	2.590	72	1.26		3.25	

W. DOBERCK,
Government Astronomer

Hongkong Observatory, 20th May, 1886.

HONGKONG OBSERVATORY.

Weather Report for April, 1886.

In the *China Coast Meteorological Register*, based on information transmitted by the Great Northern and Eastern Extension Telegraph Companies, which was daily published, is given a summary of the atmospheric circumstances in Luzon and along the Coast of China. It also contains information concerning the weather in Nagasaki and Wladivostock.

Unusual visibility was noted on the 8th and the 29th.

Dew fell on the 4th, the 5th, the 10th, the 24th, the 29th and the 30th.

Solar halos were observed on the 25th and 26th.

Fog occurred during the night between the 1st and the 2nd, and on the mornings of the 4th and 5th, and at sea level on the 2nd, 3rd, 4th, 5th and 6th, the 11th, the 24th, and the 27th.

Lightning was seen on the evening of the 1st.

On the 12th between 12.45 and 1.45 p. a thunderstorm passed from SSW round by W towards E. It was nearest (9°) at 1.20 p. Thunder was heard on the 13th, 14th and 15th. Thunder and lightning were noticed on the mornings of the 17th and of the 20th.

On the 24th between 11 a. and 1.30 p. a thunderstorm passed from NNE towards SSW. It was nearest (10°) at 11.15 a. and 12.10 p. It commenced with a sharp squall from N and occasional flashes of lightning with thunder continued till 3.30 p.

The total distance traversed by, as well as the duration and average velocity of winds from different quarters were as follows:—

<i>Direction.</i>	<i>Total Distance.</i>	<i>Duration.</i>	<i>Velocity.</i>
	Miles.	Hours.	Miles per hour.
N	85	10	8.5
NE	632	40	15.8
E	10529	586	18.0
SE	360	30	12.0
S	127	11	11.5
SW	19	4	4.8
W	116	23	5.0
NW	28	4	7.0
Calm	7	12	0.6

TABLE I.

BAROMETRIC PRESSURE FOR THE MONTH OF APRIL, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.
Apr. 1, ...	29.806	29.802	29.792	29.801	29.807	29.820	29.828	29.859	29.866	29.885	29.875	29.850	29.818	29.797	29.774	29.773	29.782	29.796	29.802	29.818	29.830	29.843	29.854	29.857	29.822
" 2, ...	.855	.843	.821	.815	.833	.859	.882	.891	.904	.908	.900	.889	.866	.835	.820	.800	.800	.807	.819	.831	.853	.871	.881	.884	.853
" 3, ...	.879	.843	.821	.821	.823	.837	.861	.878	.884	.889	.879	.863	.835	.815	.787	.769	.770	.784	.782	.798	.820	.820	.822	.816	.829
" 4, ...	.796	.775	.766	.757	.771	.790	.820	.856	.874	.881	.866	.849	.821	.800	.794	.775	.773	.778	.797	.815	.819	.832	.837	.835	.812
" 5, ...	.828	.823	.804	.793	.814	.830	.853	.877	.898	.893	.912	.909	.896	.879	.864	.847	.851	.858	.870	.879	.898	.903	.903	.888	.865
" 6, ...	.873	.869	.856	.857	.871	.876	.901	.923	.938	.950	.955	.946	.935	.920	.918	.914	.919	.917	.913	.945	.957	.954	.949	.940	.916
" 7, ...	.935	.919	.912	.905	.918	.933	.953	.958	.976	.984	.987	.970	.957	.942	.925	.913	.922	.934	.947	.965	.972	.983	.983	.983	.949
" 8, ...	.972	.959	.943	.936	.938	.940	.951	.967	.972	.975	.975	.960	.932	.914	.897	.888	.881	.891	.912	.919	.945	.962	.962	.946	.939
" 9, ...	.930	.914	.906	.905	.910	.908	.912	.925	.928	.936	.922	.892	.873	.845	.828	.809	.812	.819	.829	.840	.845	.841	.833	.824	.874
" 10, ...	.805	.789	.767	.780	.790	.792	.795	.809	.827	.819	.807	.791	.769	.739	.729	.720	.727	.738	.754	.775	.793	.797	.801	.795	.780
" 11, ...	.782	.769	.759	.762	.768	.779	.795	.820	.831	.829	.808	.776	.747	.725	.715	.723	.735	.735	.753	.759	.773	.779	.784	.783	.770
" 12, ...	.774	.759	.751	.749	.751	.755	.776	.793	.806	.803	.798	.774	.743	.748	.730	.711	.729	.757	.767	.790	.793	.795	.795	.789	.768
" 13, ...	.782	.769	.765	.760	.761	.765	.780	.790	.783	.801	.787	.771	.746	.733	.706	.703	.711	.720	.732	.746	.753	.767	.758	.740	.755
" 14, ...	.729	.709	.708	.700	.726	.727	.735	† .741	† .745	.737	.739	.715	.675	.663	.684	.674	.649	.657	.671	.679	.692	.716	.709	.695	.703
" 15, ...	.698	.674	.676	.659	.654	.657	.676	.701	.719	.740	.725	.696	.679	.676	.653	.647	.652	.661	.690	.712	.730	.738	.742	.737	.691
" 16, ...	.722	.714	.696	.704	.731	.744	.770	.788	.794	.793	.782	.761	.711	.707	.686	.666	.680	.673	.704	.710	.730	.747	.746	.723	.728
" 17, ...	.706	.697	.672	.671	.669	.686	.702	.723	.719	.733	.712	.691	.667	.647	.626	.629	.623	.632	.646	.667	.684	.701	.717	.719	.681
" 18, ...	.716	.708	.707	† .703	* .704	* .714	* .769	* .783	.792	.792	.782	.764	.752	.748	.743	.754	.771	.792	.819	.840	.849	.843	.855	.768	
" 19, ...	.854	.836	.823	.831	.832	.841	.862	.879	.903	.903	.914	.909	.889	.857	.848	.823	* .835	* .845	* .856	* .873	* .883	.887	.892	.864	.864
" 20, ...	.854	.845	.824	.853	.879	.866	.868	.898	.901	.890	.890	.895	.874	.835	.825	.810	.841	.857	.874	† .905	† .921	.924	.934	.935	.875
" 21, ...	.938	.918	.914	.911	.926	.924	.937	.971	.983	.985	.986	.973	.961	.935	.926	.925	.926	.940	.948	.958	† .968	.973	.969	.968	.948
" 22, ...	.968	.950	.944	.944	.960	.968	.984	.989	.990	.996	.994	.976	.961	.937	.915	.896	.894	.913	.913	.930	.946	.943	.942	.927	.949
" 23, ...	.915	.893	.884	.886	.890	.912	.905	.918	.916	.910	.903	.892	.858	.830	.804	.789	.784	.794	.803	.818	.840	.852	.853	.854	.863
" 24, ...	.845	.828	.795	.796	.790	.802	.821	.828	.840	.848	.843	.857	.885	.825	.838	.830	.800	.819	.832	.858	.875	.877	.875	.865	.836
" 25, ...	.867	.856	.845	.844	.860	.881	† .903	† .919	* .950	.967	.963	.955	.928	.924	.914	.912	.908	.920	.934	.947	.970	.985	.972	.921	.
" 26, ...	.935	.953	.949	.940	.943	.971	.985	.999	30.011	30.017	.992	.982	.955	.940	.930	.917	.911	.930	.945	.950	.959	.968	.975	.970	.960
" 27, ...	.953	.942	.937	.926	.928	.923	.938	.949	.957	.946	.937	.920	.897	.877	.867	.856	.858	.868	.873	.895	.904	.908	.913	.897	.911
" 28, ...	.878	.861	.853	.853	.865	.868	.886	.904	.908	.912	.917	.916	.899	.886	.868	.866	.861	.864	.881	.891	.900	.910	.910	.908	.886
" 29, ...	.901	.887	* .880	* .880	* .890	* .905	* .925	* .945	* .960	.970	.957	.937	.913	.894	.883	.872	.870	.881	.900	.922	.940	.942	.951	.944	.915
" 30, ...	.926	.910	.903	.913	.914	.934	.956	† .961	* .970	.975	.956	.943	.919	.897	.878	.869	.866	.870	.881	.905	.926	.935	.938	.930	.920
Hourly Means, }	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

* Interpolated.

† Approximate

TABLE II.

TEMPERATURE FOR THE MONTH OF APRIL, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means	Max.	Min.
April. 1,.....	69.8	68.7	68.6	68.2	67.9	67.6	67.4	68.5	70.0	70.6	74.1	75.3	74.7	74.1	75.0	75.0	72.5	70.5	70.7	70.6	70.8	70.8	69.9	70.3	70.9	75.3	67.1
" 2,.....	68.1	68.2	68.5	68.1	69.5	68.4	69.5	71.1	70.4	71.5	71.8	72.3	75.7	75.1	74.7	70.3	70.2	69.8	69.9	69.9	70.2	69.4	67.7	67.6	70.3	75.7	67.4
" 3,.....	66.7	66.1	65.3	65.0	64.8	64.4	64.6	65.8	66.1	67.5	68.2	67.6	68.0	67.8	68.1	68.5	67.6	66.9	66.7	67.0	68.2	68.7	68.2	68.6	66.9	68.9	64.3
" 4,.....	68.4	67.8	67.7	67.2	67.7	67.8	68.3	68.5	69.0	70.2	71.2	71.5	72.6	73.0	72.4	72.6	71.5	71.3	71.2	71.2	70.4	70.2	70.0	69.8	70.1	73.5	67.2
" 5,.....	69.9	70.2	69.8	69.1	69.6	69.6	69.7	70.8	71.2	71.6	73.2	74.6	74.4	73.6	74.5	73.4	72.6	71.6	71.5	71.4	71.0	70.3	70.6	70.4	71.4	74.6	69.1
" 6,.....	70.6	70.4	70.5	70.2	70.4	70.1	70.4	70.6	70.8	70.6	71.1	72.1	71.6	71.8	71.7	72.0	70.6	69.6	68.7	68.4	68.1	68.6	68.7	69.1	70.3	72.2	68.1
" 7,.....	69.6	69.7	69.5	69.1	68.9	68.2	67.5	67.1	67.7	68.4	70.8	70.7	71.5	72.1	72.6	72.3	71.3	70.6	70.3	70.2	70.2	70.1	70.2	70.0	69.9	72.9	67.1
" 8,.....	69.7	69.4	69.4	69.4	69.6	69.4	69.9	71.0	73.4	74.8	74.5	74.4	75.0	75.5	74.8	74.3	73.2	72.6	71.7	71.5	70.8	70.6	70.1	72.1	76.1	69.3	
" 9,.....	69.3	68.5	68.1	68.1	67.4	66.8	67.1	67.5	68.7	70.6	70.9	71.6	72.2	71.3	71.7	71.0	70.7	70.5	70.0	69.7	69.8	69.7	69.9	69.6	72.6	66.8	
" 10,.....	69.7	69.9	69.6	69.8	69.8	69.4	69.6	71.4	72.4	73.6	73.9	73.9	74.8	75.2	73.6	72.9	72.2	71.4	71.1	71.0	70.9	70.8	70.6	70.2	71.6	75.2	69.1
" 11,.....	70.2	70.6	70.0	69.9	69.5	69.6	69.9	71.4	72.9	74.0	75.3	74.8	74.6	75.0	74.3	74.4	73.7	73.3	72.8	72.6	72.7	72.8	73.1	73.1	72.5	75.3	69.4
" 12,.....	73.6	73.5	72.7	72.6	72.8	72.6	72.8	74.0	73.6	74.1	73.8	72.9	71.6	71.3	71.6	73.0	71.6	71.6	71.6	71.6	70.4	70.4	70.0	69.8	72.2	74.6	69.8
" 13,.....	69.7	69.5	69.6	69.7	69.8	70.1	70.2	70.7	70.6	70.1	70.4	70.4	70.1	70.0	70.5	68.7	67.3	67.1	67.8	67.1	67.6	67.1	66.7	66.7	69.1	70.7	66.6
" 14,.....	66.6	66.6	66.6	66.6	66.5	66.1	66.2	66.6	66.6	67.4	67.3	67.5	66.3	66.4	66.6	67.3	67.8	67.6	67.4	67.4	67.7	67.5	67.1	67.0	67.8	65.6	
" 15,.....	66.3	66.3	65.8	66.0	66.2	66.1	66.0	66.6	66.5	66.6	68.0	70.1	68.6	68.6	67.6	67.1	67.0	67.2	67.3	67.6	67.6	68.2	67.5	67.2	70.8	65.5	
" 16,.....	67.4	67.4	67.4	67.2	67.0	66.8	66.6	66.9	66.8	66.4	66.8	67.4	67.2	66.8	65.7	66.0	66.8	66.7	66.9	66.8	66.5	66.6	66.3	66.5	66.8	67.5	65.7
" 17,.....	66.7	66.8	66.8	67.2	67.2	66.5	66.4	66.4	66.9	66.8	67.3	67.5	68.4	68.0	67.6	67.8	67.8	67.8	68.3	68.3	68.4	68.4	68.5	68.5	67.5	68.5	66.2
" 18,.....	68.7	68.6	68.7	68.7	68.7	69.2	69.2	69.6	69.6	70.7	71.4	71.6	71.5	71.4	70.7	70.2	69.7	69.2	69.5	69.6	69.6	68.9	68.3	69.7	72.3	68.3	
" 19,.....	67.8	67.3	66.9	66.4	66.4	66.4	67.0	67.7	68.4	68.5	69.6	69.3	69.2	69.4	69.6	69.4	69.2	68.5	68.3	68.7	68.5	68.3	68.5	66.8	67.5	65.7	
" 20,.....	68.4	67.8	67.5	63.8	63.4	62.9	63.3	63.0	63.1	61.1	60.9	60.6	62.0	63.2	64.2	64.8	64.6	64.7	64.8	65.3	65.8	66.4	66.6	66.1	64.3	68.5	60.5
" 21,.....	66.4	66.2	66.1	66.2	66.7	66.6	66.6	68.3	69.6	70.0	70.4	70.6	70.7	70.2	70.6	70.3	69.8	69.4	69.0	69.1	69.0	69.3	69.4	69.5	68.7	70.7	66.0
" 22,.....	69.2	69.0	68.8	68.7	68.5	68.4	68.4	68.8	69.5	69.6	70.1	70.1	70.0	70.3	70.6	70.1	69.8	69.6	69.9	69.8	69.7	69.7	69.6	69.5	69.5	70.8	68.4
" 23,.....	69.8	69.8	70.0	70.3	70.4	70.5	70.6	71.3	71.6	71.5	72.5	73.1	73.0	72.7	72.6	71.6	71.6	71.6	71.6	71.7	71.7	71.5	71.4	73.2	69.5		
" 24,.....	72.0	72.5	73.4	72.6	73.5	73.5	75.7	77.1	77.8	77.6	75.8	68.5	67.8	68.6	69.1	68.8	69.5	70.0	68.8	69.2	68.6	67.9	67.5	67.6	71.4	78.3	67.1
" 25,.....	67.8	67.8	71.8	71.5	71.0	70.4	70.5	71.8	72.7	74.9	71.5	71.0	71.3	71.5	71.3	71.3	70.9	69.8	69.8	69.6	69.6	69.5	69.3	70.7	74.9	67.6	
" 26,.....	68.9	68.1	67.3	66.8	66.8	67.1	66.4	67.2	68.2	68.7	69.1	69.1	68.9	69.6	69.1	68.9	68.8	68.6	68.6	68.9	68.9	68.5	68.0	68.3	69.6	66.4	
" 27,.....	67.8	67.3	66.9	66.8	66.4	66.0	66.4	66.6	68.0	69.6	70.9	71.0	71.4	71.5	69.6	69.3	68.5	68.5	68.5	68.5	68.5	68.2	68.0	68.4	72.7	65.9	
" 28,.....	67.8	67.8	67.8	68.0	67.9	67.9	67.9	67.9	67.9	68.1	67.3	67.1	66.9	66.6	66.6	65.8	65.9	68.9	68.5	67.8	66.8	65.9	65.9	68.5	71.7	65.9	
" 29,.....	67.0	66.7	66.7	66.9	67.1	67.2	67.2	67.6	68.2	68.8	70.4	70.5	70.5	70.6	71.6	71.1	70.3	70.1	69.9	68.5	67.8	66.8	65.9	68.5	71.7	64.5	
" 30,.....	66.0	66.0	65.8	65.5	65.0	64.9	66.6	69.0	72.6	74.7	77.8	77.5	77.7	76.7	74.7	73.9	72.2	71.8	70.5	69.9	69.4	69.0	68.9	68.8	70.6	77.8	64.5
Hourly Means,	68.7	68.5	68.4	68.2	68.2	68.0	68.3	69.0	69.7	70.3	70.9	70.8	70.9	70.9	70.8	70.4	69.9	69.5	69.3	69.2	69.2	69.1	68.9	68.8	69.4	72.3	66.9

TABLE III.

TEMPERATURE OF EVAPORATION AND RADIATION, FOR THE MONTH OF APRIL, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.	Sun.	Rad.	
Apr. 1.....	68.6	67.6	67.7	67.1	67.2	66.9	66.6	67.7	69.0	69.5	70.2	72.0	72.1	71.7	72.2	72.2	70.9	69.6	70.0	69.6	69.7	69.6	69.6	69.0	69.4	69.4	134.5	64.9
" 2.....	68.1	68.2	68.5	68.1	69.2	68.3	69.1	69.7	69.4	70.0	70.2	70.2	72.0	71.6	71.5	69.1	69.2	69.3	69.4	69.6	69.5	68.5	67.1	67.2	69.3	136.1	68.2	
" 3.....	66.3	65.8	65.2	64.8	64.6	64.2	64.1	64.9	64.7	65.6	66.2	65.7	66.2	66.2	66.7	67.2	66.6	66.3	66.2	66.4	67.4	67.6	67.4	67.8	66.0	127.4	65.9	
" 4.....	67.6	67.3	67.2	66.6	67.2	67.3	67.8	68.1	68.5	69.3	70.1	70.0	70.5	70.7	70.5	70.7	69.6	69.6	70.3	70.4	69.9	69.7	69.7	69.5	69.1	136.4	66.5	
" 5.....	69.7	70.1	69.7	68.9	69.5	69.6	69.7	70.8	71.0	70.9	71.5	72.4	71.8	71.5	71.6	71.5	71.2	70.5	70.3	70.6	70.2	69.7	69.9	69.5	70.5	142.8	67.9	
" 6.....	69.5	69.3	69.4	69.2	69.2	68.7	69.0	68.9	68.7	68.5	68.5	68.8	68.5	68.4	68.6	68.6	68.4	66.5	65.8	66.0	66.1	66.6	67.0	67.4	68.1	136.9	66.5	
" 7.....	67.8	68.0	67.7	67.2	67.1	66.8	66.5	66.0	66.3	66.8	68.1	67.6	68.0	68.2	68.5	68.6	68.2	67.7	67.6	67.6	67.8	68.2	68.7	68.5	67.6	137.5	67.2	
" 8.....	68.2	67.7	67.8	67.7	67.6	67.3	67.5	68.0	69.1	69.5	69.7	69.5	69.6	70.1	69.9	69.4	69.5	69.1	69.1	68.9	69.1	68.6	68.2	67.7	68.7	134.6	68.2	
" 9.....	67.2	66.7	65.7	65.7	65.6	65.1	65.1	64.8	65.7	66.7	66.9	67.6	68.2	67.8	68.2	68.0	68.1	68.2	68.2	68.5	68.5	68.6	68.7	67.2	129.2	69.3		
" 10.....	68.5	68.9	68.4	68.4	68.3	68.1	68.1	68.1	69.4	69.9	70.2	70.3	70.7	70.8	70.3	70.2	70.2	70.2	70.1	70.1	70.1	70.1	69.6	69.2	69.6	140.0	67.7	
" 11.....	69.2	69.4	69.1	68.8	68.4	68.5	68.9	69.8	70.2	70.8	71.2	70.5	70.3	71.0	71.0	71.5	71.3	71.2	71.3	71.2	71.4	71.5	71.7	71.4	70.4	132.6	66.4	
" 12.....	71.7	71.7	71.2	71.2	71.5	71.4	71.6	72.2	72.1	72.1	71.9	71.5	70.7	70.2	69.3	70.2	69.3	69.5	69.4	69.2	69.5	69.5	69.5	69.4	70.7	113.8	68.3	
" 13.....	69.2	69.1	69.1	69.2	69.4	69.2	69.4	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	66.3	66.0	66.8	66.3	66.0	65.7	64.7	63.6	68.1	95.7	66.2
" 14.....	64.6	64.0	64.0	64.0	64.1	64.4	64.5	64.7	65.9	66.4	66.2	66.4	65.6	65.5	64.6	64.3	63.8	63.4	63.7	64.1	64.7	65.3	65.0	64.7	64.7	102.0	64.7	
" 15.....	65.0	65.1	64.1	64.5	64.8	64.6	65.1	65.4	65.0	65.5	65.8	66.5	64.5	65.5	65.1	65.4	65.4	65.3	65.6	65.6	66.2	66.5	66.8	65.3	117.0	63.8		
" 16.....	65.6	65.3	65.3	65.4	65.4	65.5	65.4	65.6	65.7	65.6	65.8	66.0	65.6	65.5	65.1	65.4	65.4	65.6	65.6	65.6	65.7	65.6	65.5	65.5	86.8	64.8		
" 17.....	65.8	65.6	65.6	66.2	66.3	65.4	65.5	65.6	66.1	66.3	66.2	66.5	67.3	66.9	66.8	67.1	67.2	67.3	67.6	67.6	67.7	67.6	67.3	67.5	66.6	85.6	65.2	
" 18.....	67.6	67.7	67.7	67.6	67.1	67.1	67.3	67.5	68.5	67.4	67.8	68.6	68.4	68.5	68.3	67.6	67.5	65.9	65.8	65.9	65.9	66.0	65.8	65.4	67.2	122.4	67.2	
" 19.....	65.5	64.8	64.0	63.4	62.7	62.2	62.2	62.3	62.7	62.5	63.5	63.2	63.5	62.8	62.9	62.1	61.2	61.9	*61.9	*62.0	*62.1	62.2	62.2	62.2	62.7	126.8	65.2	
" 20.....	62.6	62.8	62.2	61.7	61.3	59.6	59.0	58.1	58.0	58.5	58.4	58.5	58.5	59.1	59.5	60.3	60.1	60.6	60.5	61.2	61.5	62.0	61.7	61.9	60.3	115.2	57.7	
" 21.....	62.2	62.4	62.8	62.8	63.3	63.6	63.9	64.5	65.3	65.6	65.2	65.0	65.7	65.3	65.6	65.7	65.8	66.1	66.0	66.3	66.6	67.3	67.5	66.9	65.1	126.2	64.9	
" 22.....	66.6	66.3	65.6	65.8	65.7	65.6	65.6	65.5	65.7	65.9	66.1	66.5	67.1	67.3	67.3	67.2	67.3	67.6	67.8	67.6	67.6	67.5	67.8	67.9	66.7	97.3	67.3	
" 23.....	68.3	68.4	68.6	68.6	68.7	68.8	68.9	69.5	69.7	69.5	70.2	70.5	70.5	70.3	70.3	70.1	70.1	70.0	70.3	70.4	70.6	70.7	70.8	71.0	69.8	119.0	68.9	
" 24.....	71.5	71.9	72.3	72.0	72.7	72.5	73.0	73.9	74.3	74.7	70.7	66.5	67.3	67.6	67.7	67.7	68.2	68.3	67.6	67.3	67.0	66.8	66.9	66.9	69.8	115.6	65.0	
" 25.....	67.1	66.9	65.9	65.4	64.3	63.6	64.7	64.9	65.2	66.8	66.7	65.3	65.3	65.6	65.6	65.5	65.1	64.6	64.4	64.2	63.9	63.5	62.7	62.1	65.0	133.0	64.4	
" 26.....	61.4	61.5	61.7	60.8	59.7	58.1	58.1	59.2	58.9	58.5	58.8	59.6	60.0	61.3	61.4	62.5	62.0	63.3	63.3	64.2	64.4	64.7	64.4	64.2	61.3	126.2	65.2	
" 27.....	64.4	63.9	63.7	63.1	62.9	62.7	62.8	62.3	62.6	63.7	64.8	64.5	65.4	65.6	65.1	64.7	64.4	64.5	64.6	64.4	64.6	64.6	64.7	64.9	64.1	131.4	65.1	
" 28.....	64.4	64.4	64.9	64.9	65.0	64.9	*64.8	*64.8	*64.7	*64.6	64.5	63.4	64.4	64.6	65.1	64.6	64.3	65.1	64.9	65.1	65.0	65.1	64.8	64.7	82.9	64.6		
" 29.....	64.8	64.9	64.8	65.0	64.8	64.6	64.6	64.5	64.1	65.3	65.7	64.8	65.5	65.5	64.6	64.6	65.3	65.1	64.8	64.8	64.6	64.5	64.3	63.9	64.8	132.0	62.5	
" 30.....	63.8	63.4	63.2	63.0	62.9	63.4	64.1	66.3	67.5	68.2	66.7	67.5	69.1	69.2	69.2	68.7	68.2	67.8	67.7	67.6	67.6	67.6	67.0	65.8	66.5	136.8	58.6	
Hourly Means,	66.8	66.6	66.4	66.2	66.2	65.9	66.1	66.5	66.8	67.1	67.2	67.2	67.4	67.5	67.4	67.3	67.0	66.9	66.9	66.9	67.0	67.0	66.9	66.7	66.8	121.8	65.6	

* Interpolated.

TABLE IV.

TABLE IV.
AN HOURLY AND DAILY RELATIVE HUMIDITY AND TENSION OF AQUEOUS VAPOUR
FOR THE MONTH OF APRIL, 1886.

DUR.	HOURLY MEAN.		DATE.	DAILY MEAN.	
	Humidity.	Tension.		Humidity.	Tension.
			1886.		
a	90	0.635	April 1,.....	92	0.698
"	90	0.631	,, 2,.....	95	0.704
"	90	0.625	,, 3,.....	95	0.628
"	90	0.620	,, 4,.....	95	0.699
"	90	0.620	,, 5,.....	95	0.735
"	90	0.612	,, 6,.....	89	0.660
"	89	0.615	,, 7,.....	89	0.647
"	87	0.620	,, 8,.....	83	0.657
"	85	0.622	,, 9,.....	87	0.636
"	84	0.625	,, 10,.....	90	0.698
"	82	0.620	,, 11,.....	90	0.717
"	83	0.621	,, 12,.....	93	0.732
oon.	83	0.627	,, 13,.....	95	0.675
p	83	0.631	,, 14,.....	88	0.581
"	83	0.629	,, 15,.....	89	0.600
"	85	0.630	,, 16,.....	93	0.612
"	85	0.626	,, 17,.....	95	0.642
"	87	0.628	,, 18,.....	87	0.635
"	87	0.630	,, 19,.....	72	0.497
"	88	0.632	,, 20,.....	78	0.472
"	89	0.636	,, 21,.....	82	0.573
"	90	0.637	,, 22,.....	86	0.619
"	90	0.636	,, 23,.....	93	0.709
"	90	0.630	,, 24,.....	93	0.709
fidt.	90		,, 25,.....	72	0.543
			,, 26,.....	65	0.451
			,, 27,.....	78	0.542
			,, 28,.....	87	0.580
			,, 29,.....	81	0.565
			,, 30,.....	80	0.597
Mean,	87	0.627	Mean,	87	0.627

TABLE V.
DURATION OF SUNSHINE.

TABLE VI.
RAINFALL FOR THE MONTH OF APRIL, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Sums.
April 1,	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" 2,	0·005
" 3,
" 4,
" 5,	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·010
" 6,
" 7,
" 8,
" 9,
" 10,	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·010
" 11,	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·005
" 12,	0·025	0·070	0·010	0·265	0·010	0·010	...	...	...	0·020	0·055	...	...	...	...	...	0·465
" 13,	0·010	0·005	0·025	0·200	0·040	...	0·020	0·025	0·010	...	...	0·015	...	...	0·005	0·005	0·360
" 14,	0·005	...	0·005	0·195	0·360	0·010	...	...	...	...	...	...	...	...	...	...	0·575
" 15,	0·040	...	...	...	...	...	0·040	0·010	...	...	...	0·005	0·005	...	...	...	...	...	...	...	...	...	0·100
" 16,	0·005	0·005	...	...	0·005	...	...	0·005	...	0·110	0·010	...	...	0·020	0·060	...	...	...	...	0·150	...	...	0·370	...	
" 17,	0·015	0·010	...	...	0·025	0·015	...	...	...	...	...	...	...	0·065	0·035	0·200	0·080	...	...	0·010	0·010	...	...	...	0·465
" 18,
" 19,
" 20,	0·400	0·525	0·065	...	0·005	...	0·010	0·030	0·175	0·080	...	...	...	...	...	...	...	...	...	...	...	...	...	1·290
" 21,
" 22,
" 23,
" 24,	0·600	0·600	0·400	0·095	0·055	0·065	...	...	...	...	...	...	...	...	...	1·815
" 25,
" 26,
" 27,
" 28,	0·035	0·060	0·090	0·010	...	0·010	...	...	...	...	...	...	...	...	0·205
" 29,
" 30,
Sums,.....	0·025	0·010	0·405	0·565	0·065	0·030	0·025	...	0·065	0·085	0·870	1·040	0·970	0·555	0·110	0·180	0·105	0·210	0·100	0·070	...	0·010	0·165	0·015	5·675

TABLE VII.

DIRECTION AND VELOCITY OF THE WIND FOR THE MONTH OF APRIL, 1886.

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TABLE VIII.
MEAN HOURLY COMPONENTS AND MEAN DIRECTION OF THE WIND, FOR APRIL, 1886.

Hour.	Components (miles per hour).						Direction.
	N	E	S	W	+ N-S	+ E-W	
1 a.	0.6	13.7	0.1	0.1	+ 0.6	+ 13.6	E 3° N
2 "	1.1	14.2	0.3	0.1	0.9	14.0	E 4° N
3 "	2.2	14.3	0.5	0.1	1.7	14.3	E 7° N
4 "	1.6	13.7	0.4	0.1	1.2	13.6	E 5° N
5 "	1.0	14.2	0.7	0.1	0.3	14.1	E 1° N
6 "	1.1	16.9	0.3	0.0	0.9	16.9	E 3° N
7 "	1.0	17.3	0.7	0.0	0.3	17.3	E 1° N
8 "	1.4	17.3	1.0	0.0	+ 0.4	17.3	E 1° N
9 "	0.5	18.1	0.7	0.1	- 0.2	18.0	E 1° S
10 "	1.0	17.9	0.3	0.1	+ 0.6	17.8	E 2° N
11 "	0.9	18.6	0.5	0.0	+ 0.4	18.6	E 1° S
Noon.	0.2	18.3	0.7	0.0	- 0.5	18.3	E 2° S
1 p.	0.7	17.1	1.3	0.0	0.6	17.1	E 2° S
2 "	0.4	16.3	1.3	0.6	0.9	15.7	E 3° S
3 "	0.2	16.0	1.6	0.2	1.5	15.7	E 6° S
4 "	0.0	15.3	1.0	0.6	- 1.0	14.7	E 4° S
5 "	0.5	15.6	0.5	0.5	0.0	15.1	E
6 "	0.4	15.1	0.0	0.6	+ 0.3	14.6	E 1° N
7 "	0.9	13.9	0.3	0.5	0.5	13.4	E 2° N
8 "	0.4	13.6	0.3	0.6	0.0	13.0	E
9 "	0.4	14.5	0.1	0.3	0.4	14.2	E 2° N
10 "	0.7	14.3	0.2	0.2	0.5	14.1	E 2° S
11 "	0.4	14.2	0.0	0.1	0.4	14.0	E 2° S
Midt.	0.6	13.8	0.4	0.1	+ 0.2	13.7	E 1° N
Mean,.....	0.8	15.6	0.6	0.2	+ 0.2	+ 15.4	E 1° N

TABLE IX.

DIRECTION AND FORCE OF THE WIND AT VICTORIA PEAK, AND SEA DISTURBANCE.

DATE.	4 a.			10 a.			4 p.			10 p.	
	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.
1886.											
April 1,	0	S	5	0	S	6	2	S	5
" 2,	2	SE	4	2	SE	5	1	SE	5
" 3,	2	SE	5	2	SE	5	2	SE	5
" 4,	0	SE	4	0	S	5	0	S	5
" 5,	0	S	4	0	S	4	0	SSW	3
" 6,	0	E	3	2	E	5	2	E	4
" 7,	1	E	5	2	E	4	1	E	5
" 8,	1	E	5	2	E	6	2	E	6
" 9,	4	E	6	6	E	6	3	E	5
" 10,	2	SE	4	3	SW	4	0	S	4
" 11,	0	SE	3	1	SE	4	1	SE	4
" 12,	0	SE	5	0	W	4	1	N	3
" 13,	0	E	3	3	SW	4	3	W	4
" 14,	2	ESE	4	2	E	5	4	E	5
" 15,	4	E	4	3	N	4	3	EE	6
" 16,	3	ESE	6	3	SE	5	4	SE	6
" 17,	3	ESE	6	3	S	5	3	S	4
" 18,	2	E	4	2	SE	6	2	EE	6
" 19,	4	E	6	5	EE	5	4	EE	6
" 20,	4	E	5	5	E	4	4	EE	5
" 21,	3	E	4	2	E	4	3	EE	3
" 22,	4	E	5	4	E	5	4	EE	6
" 23,	3	SSE	6	4	SE	6	2	SSE	6
" 24,	0	S	6	2	E	5	4	EE	4
" 25,	3	E	4	2	E	5	5	EE	5
" 26,	5	E	6	5	E	6	5	EE	6
" 27,	3	E	4	3	E	3	3	E	5
" 28,	3	E	5	3	E	5	3	E	5
" 29,	2	E	5	1	E	3	1	NE	4
" 30,	1	NNE	4	1	N	3	1	E	5
Mean,.....	2.0	E 20° S	4.7	2.4	E 21° S	4.7	2.4	E 19° S	4.8

TABLE X.
VICTORIA PEAK.

DATE.	BAROMETER.			TEMPERATURE.							
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	Sun.	Max.	Min.	Rad.	
1861, 1,.....	ins.	ins.	ins.	°	°	°	°	°	°	°	°
1,.....	28.151	28.055	28.125	66.6	68.2	65.0	93.0	68.4	61.2	55.3	55.3
2,.....	.169	.092	.101	67.2	67.6	66.0	99.0	67.8	65.0	60.3	60.3
3,.....	.144	.048	.068	65.6	67.4	66.0	127.0	67.9	61.0	63.3	63.3
4,.....	.145	.065	.097	67.6	69.4	66.6	123.0	70.8	65.0	66.3	66.3
5,.....	.171	.149	.135	71.2	71.4	67.6	133.0	72.3	64.8	64.3	64.3
6,.....	.185	.182	.148	68.4	68.8	66.6	123.0	71.1	65.2	63.3	63.3
7,.....	.214	.201	.204	66.6	68.6	66.6	131.0	73.1	64.8	63.3	63.3
8,.....	.236	.177	.174	67.6	68.6	66.6	125.0	69.3	63.8	* 64.3	64.3
9,.....	.185	.091	.079	65.0	67.6	65.6	116.0	67.8	64.6	64.8	64.8
10,.....	.104	.034	.060	67.6	68.6	67.6	141.0	69.5	65.6	63.7	63.7
11,.....	.112	28.026	.049	68.2	71.0	69.6	138.0	71.2	67.0	66.3	66.3
12,.....	.081	27.999	.043	70.0	68.8	67.6	107.0	70.2	67.6	65.3	65.3
13,.....	.066	.992	28.038	68.0	67.0	65.8	93.1	68.7	63.8	62.3	62.3
14,.....	.004	.946	27.947	64.2	63.6	62.6	98.8	66.0	61.8	61.3	61.3
15,.....	.001	.984	.979	62.8	63.6	62.6	105.0	64.3	61.6	61.3	61.3
16,.....	28.049	.948	.990	62.7	63.6	63.0	88.4	64.8	61.9	60.9	60.9
17,.....	27.994	27.945	27.988	63.6	66.4	64.0	97.0	67.1	61.8	61.3	61.3
18,.....	28.055	28.014	28.081	65.6	65.6	63.2	118.8	66.6	59.8	57.3	57.3
19,.....	.148	.077	.091	61.6	63.2	61.6	122.0	66.8	60.8	56.3	56.3
20,.....	.116	.065	.081	57.4	58.8	56.6	104.0	61.9	54.8	55.3	55.3
21,.....	.215	.181	.199	60.8	64.0	61.6	124.0	67.1	56.0	56.3	56.3
22,.....	.215	.153	.148	63.0	63.6	61.6	98.8	67.3	61.6	59.3	59.3
23,.....	.164	.088	.093	65.6	66.6	68.7	108.8	68.9	61.6	63.3	63.3
24,.....	.132	.109	.160	69.6	65.6	66.0	105.0	69.8	63.8	57.3	57.3
25,.....	.210	.187	.195	67.0	64.6	63.6	128.0	67.8	63.6	61.3	61.3
26,.....	.251	.171	.200	62.6	63.6	61.0	123.0	67.7	60.8	57.8	57.8
27,.....	.201	.143	.153	63.4	65.7	63.6	129.8	66.8	61.0	59.7	59.7
28,.....	.158	.124	.165	63.4	62.7	62.0	87.0	64.3	61.6	59.3	59.3
29,.....	.224	.153	.183	63.8	64.6	64.2	127.0	66.3	61.2	59.9	59.9
30,.....	.234	.169	.192	64.6	71.6	65.8	132.0	74.5	63.8	59.3	59.3
.....
Mean,.....	28.144	28.084	28.106	65.4	66.3	64.6	114.9	68.2	62.6	61.0	61.0

TABLE XI.
HUMIDITY AT THE OBSERVATORY AND AT VICTORIA PEAK.

DATE.	RELATIVE HUMIDITY.						TENSION OF AQUEOUS VAPOUR.					
	OBSERVATORY.			VICTORIA PEAK.			OBSERVATORY.			VICTORIA PEAK.		
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.
1861, 1,.....	95	87	94	95	98	98	0.708	0.754	0.709	0.626	0.685	0.613
2,.....	93	94	95	98	100	97	.715	.697	.686	.662	.678	.628
3,.....	90	93	95	100	96	97	.607	.650	.662	.633	.652	.628
4,.....	95	90	97	96	95	97	.707	.727	.720	.657	.692	.641
5,.....	97	90	97	89	86	95	.749	.747	.719	.684	.667	.650
6,.....	90	83	90	96	96	96	.670	.655	.627	.675	.685	.634
7,.....	92	82	90	.95	95	95	.637	.651	.666	.626	.666	.620
8,.....	75	74	89	95	91	95	.651	.647	.671	.639	.644	.620
9,.....	80	85	93	97	90	100	.604	.646	.681	.606	.608	.633
10,.....	82	87	96	95	96	95	.683	.704	.728	.643	.680	.643
11,.....	85	86	94	96	93	95	.712	.734	.756	.671	.708	.689
12,.....	89	87	97	93	92	95	.758	.703	.715	.684	.655	.643
13,.....	97	95	92	95	97	98	.714	.667	.616	.652	.650	.631
14,.....	95	84	87	96	94	94	.636	.564	.593	.583	.558	.538
15,.....	95	89	91	97	98	100	.615	.594	.623	.561	.584	.570
16,.....	96	95	95	99	100	94	.621	.609	.622	.569	.591	.552
17,.....	97	96	96	100	97	92	.641	.656	.667	.591	.636	.552
18,.....	89	85	82	100	89	85	.643	.635	.593	.633	.572	.499
19,.....	70	64	67	89	85	83	.487	.462	.474	.487	.499	.457
20,.....	85	76	76	88	92	100	.458	.465	.498	.422	.462	.461
21,.....	78	78	90	96	92	94	.573	.572	.643	.516	.552	.518
22,.....	81	85	89	97	98	100	.589	.629	.646	.565	.584	.550
23,.....	90	93	95	100	97	99	.823	.665	.644	.726	.565	.594
24,.....	86	95	95	100	89	92	.550	.552	.506	.584	.578	.558
25,.....	64	72	70	87	95	94	.357	.481	.556	.445	.475	.496
26,.....	50	67	79	78	80	91	.512	.551	.561	.534	.597	.525
27,.....	70	77	81	91	94	89	.560	.584	.585	.560	.556	.483
28,.....	82	92	88	94	97	86	.579	.548	.577	.555	.578	.518
29,.....	82	72	88	93	95	85	.604	.631	.658	.581	.628	.530
30,.....	70	75	92	95	81	83	...	...	...	...	...	...
Mean,.....	85	84	89	95	93	94	0.632	0.630	0.638	0.600	0.611	0.579

TABLE XII.

AMOUNT AND CLASSIFICATION OF CLOUDS AND DIRECTION WHENCE COMING.

DATE.	1 a.			4 a.			7 a.			10 a.		
	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction
1886.												
April 1,	9	cum.	SSW	10	cum-nim.	...	10	cum-nim.	SSW	10	cum-nim.	
" 2,	9	cum. fog.	SSE	6	cum.	SSE	7	cum. cum-nim.	S ESE	10	cum. cum-nim.	
" 3,	10	nim.	...	7	nim.	S	8	cum. cum-nim.	S ESE	10	cum-nim.	
" 4,	8	cum.	SSW	...	fog.	...	9	cum.	SSW	10	cum. fog.	
" 5,	*9	cum.	SSW	7	nim.	SSW	9	cum.	SSW	8	cum. fog.	
" 6,	1	cum.	...	6	nim.	...	7	cum.	ESE	10	cum. cum.	
" 7,	10	str.	...	10	cum-nim.	E	10	cum-nim.	E	10	cum-nim.	
" 8,	10	cum.	...	8	nim.	E	10	cum.	E	7	cum. cum.	
" 9,	10	cum.	ESE	10	nim.	E	9	cum.	E	10	cum.	
" 10,	10	nim.	E	10	nim.	E	6	cum.	ESE	3	sm-cum. cum.	
" 11,	2	cum.	...	1	cum.	...	1	cum.	...	8	cum.	
" 12,	9	cum.	SSW	8	nim.	S	7	cum.	SSW	10	cum. nim.	
" 13,	8	sm-cum. cum.	W	9	cum-nim.	NNE	10	cum-nim.	E	10	nim.	
" 14,	10	cum.	SE	10	cum-nim.	E	10	cum-nim.	E	10	nim.	
" 15,	10	nim.	...	10	cum-nim.	NE	10	cum-nim.	...	10	nim.	
" 16,	10	nim.	E	10	cum-nim.	ENE	10	nim.	...	10	nim.	
" 17,	10	nim.	...	10	nim.	E	10	cum-nim.	E	10	nim.	
" 18,	10	cum-nim.	...	10	R-cum.	E	10	cum-nim.	E	10	cum. cum-nim.	
" 19,	10	sm-cum. cum.	W E	9	sm-cum. cum.	W E	10	sm-cum. cum.	W E	4	sm-cum. cum.	
" 20,	10	cum.	S	10	nim.	...	10	cum-nim.	ESE	10	cum. nim.	
" 21,	10	cum.	E	9	cum.	...	10	cum. cum-nim.	E	4	cum.	
" 22,	10	cum.	ESE	10	cum.	E	10	cum-nim.	E	10	cum-nim.	
" 23,	10	cum.	ESE	10	cum-nim.	ESE	10	cum-nim.	ESE	10	R-cum.	
" 24,	10	cum.	...	9	nim.	SE	10	cum. cum-nim.	S	10	cum. cum-nim.	
" 25,	8	c-str. cum.	WNW	6	cum.	WNW	5	c-str. cum.	E	7	c-str. cum.	
" 26,	10	cum.	E	10	cum-nim.	...	10	cum.	W	0	...	
" 27,	10	cum.	E	8	cum-nim.	E	7	cum.	E	6	sm-cum.	
" 28,	10	cum-nim.	...	10	nim.	E	10	cum-nim.	E	10	cum-nim.	
" 29,	10	nim.	E	10	R-cum.	E	10	cum-nim.	E	10	cum. cum-nim.	
" 30,	0	...	...	1	cum.	...	3	c-str.	WSW	2	c.	
.....	
Mean,.....	8.8	...	...	8.1	...	...	8.6	...	...	8.3	...	

* Interpolated.

TABLE XII,—Continued.

AMOUNT AND CLASSIFICATION OF CLOUDS AND DIRECTION WHENCE COMING.

TE.	1 p.			4 p.			7 p.			10 p.			Daily and Monthly Means.
	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	
6.													
1,.....	10	nim.	SSW	10	cum. cum-nim.	W S	10	cum-nim.	SSE	9	cum-nim.	SSE	9.7
2,.....	9	cum. cum-nim.	S	9	cum. R-cum.	SSE SE	10	cum. fog. c-cum.	...	10	str.	...	8.8
3,.....	10	cum. cum-nim.	S	10	cum.	ESE	5	cum. fog.	...	8	cum.	SSE	8.5
4,.....	6	cum. sm-cum.	W	9	cum.	W	10	cum.	SSW	9	cum.	SSW	7.6
5,.....	7	cum.	SSW	4	cum. c-str. cum.	W WSW	1	c-str.	...	0	...	...	5.6
6,.....	4	cum. cum.	SSW	8	R-cum. c-cum.	E	1	cum.	E	5	cum.	E	5.2
7,.....	6	cum.	ESE	7	sm-cum. cum.	N	0	...	...	10	str.	...	7.9
8,.....	8	c-cum. cum.	WSW	3	cum. c-cum. cum.	WSW E	10	cum.	ESE	10	cum.	ESE	8.3
9,.....	10	cum-nim.	E	10	cum-nim.	E	10	cum-nim.	ESE	10	nim.	...	9.9
10,.....	6	c-str. cum.	W S	1	cum.	SSE	0	...	...	0	...	...	4.5
11,.....	0	...	...	7	sm-cum. cum.	SSW	10	cum.	S	10	cum.	S	4.9
12,.....	10	cum-nim.	SSE	9	sm-cum. cum-nim.	SSW S	10	cum-nim.	SW	10	str. cum.	WSW	9.1
13,.....	10	nim.	E	10	nim.	W	10	nim.	...	10	nim.	...	9.6
14,.....	10	nim.	E	10	cum-nim.	E	10	cum-nim.	E	10	cum.	E	10.0
15,.....	10	cum-nim.	NE	10	nim.	...	10	cum-nim.	E	10	cum-nim.	E	10.0
16,.....	10	nim.	E	10	nim.	E	10	nim.	E	10	nim.	E	10.0
17,.....	10	cum-nim.	E	10	nim.	E	10	nim.	E	10	nim.	E	10.0
18,.....	10	cum. cum.	SSW E	9	cum.	N	10	cum.	W	10	cum.	W	9.9
19,.....	10	sm-cum. cum.	W	7	c-str. cum.	WSW W	10	str.	...	10	str. cum. cum.	SW	8.7
20,.....	10	cum-nim.	E	7	sm-cum. cum.	WSW SSW	10	str. cum.	ESE	10	str. cum. cum.	SE	9.6
21,.....	6	sm-cum. cum.	W	10	c-str.	W	10	str.	...	10	cum-nim.	E	8.6
22,.....	10	cum-nim.	E	10	cum-nim.	E	10	cum-nim.	E	10	cum-nim.	E	10.0
23,.....	10	cum. cum-nim.	SE	10	cum. cum-nim. cum.	W SE WNW	10	cum-nim.	SE	10	cum-nim.	SE	10.0
24,.....	10	nim.	...	10	cum. cum.	NNW	10	cum.	WNW	1	str.	...	8.8
25,.....	6	c-str. cum.	W	8	c-str. cum.	S W	10	c-str. cum.	E	10	cum.	E	7.5
26,.....	3	c-str.	W	7	cum.	SSE	10	cum-nim.	E	10	cum-nim.	E	7.5
27,.....	10	sm-cum. cum.	WSW SE	10	cum. cum.	WSW SSE	10	str.	...	10	str.	...	8.9
28,.....	10	nim.	E	10	cum-nim.	E	10	cum-nim.	E	10	nim.	E	10.0
29,.....	10	R-cum. cum-nim.	NE E	2	c-str. cum.	W ...	0	...	...	0	...	...	6.5
30,.....	1	c.	W	1	cum.	E	0	...	...	0	...	...	1.0
....
mean,.....	8.1	...	...	7.9	...	...	7.9	...	...	8.1	...	...	8.2

TABLE XIII.
RAINFALL AT DIFFERENT STATIONS.

DATE.	OBSERVATORY.		STONE CUTTERS' ISLAND.		VICTORIA PEAK
	Amount.	Duration.	Amount.	Amount.	
1886.	ins.	hrs.	ins.	ins.	ins.
April 1,.....	0.005	2	...	...	...
" 2,.....	...	1	...	...	...
" 3,.....	...	...	...	...	...
" 4,.....	0.005	...	...	...	...
" 5,.....	0.005	...	...	...	...
" 6,.....	...	...	...	...	...
" 7,.....	...	...	...	...	...
" 8,.....	...	...	...	...	...
" 9,.....	0.005	3	...	...	...
" 10,.....	0.010	...	...	...	...
" 11,.....	0.025	1	...	...	0.54
" 12,.....	0.455	8	0.63	...	0.38
" 13,.....	0.350	12	0.25	...	0.76
" 14,.....	0.660	10	0.45	...	0.40
" 15,.....	0.030	18	0.26	...	...
" 16,.....	0.415	12	0.32	...	0.95
" 17,.....	0.400	...	...	...	...
" 18,.....	...	...	...	...	0.70
" 19,.....	1.035	5	0.98	...	0.30
" 20,.....	0.255	3	0.31	...	...
" 21,.....	...	...	...	...	...
" 22,.....	...	...	...	...	...
" 23,.....	...	...	...	...	2.10
" 24,.....	1.815	5	1.43	...	...
" 25,.....	...	...	...	...	...
" 26,.....	...	1	...	...	...
" 27,.....	...	6	0.14	...	0.23
" 28,.....	0.205	...	...	...	...
" 29,.....	...	...	...	...	...
" 30,.....	0.005	...	...	...	...
.....
Total,.....	5.680	99	3.77	6.36	

W. DOBERCK
Government Astronomer

Hongkong Observatory, 3rd June, 1886.

HONGKONG OBSERVATORY.

Weather Report for May, 1886.

the *China Coast Meteorological Register*, based on information transmitted by the Great Northern Eastern Extension Telegraph Companies, which was daily published, is given a summary of the meteoric circumstances in Luzon and along the Coast of China. It also contains information regarding the weather in Nagasaki and Vladivostock.

Unusual visibility was noted on the 6th, the 14th, the 17th, and the 18th.

Lightning occurred in the morning of the 5th round the Observatory, and at sea level on the evening of the 16th.

Cloud was noted during the night following the 4th, and in the evening on the 12th, the 13th, the 14th, the 17th, the 18th, the 19th, the 21st, and the 23rd.

Unusual coronas were observed on the 12th and the 13th.

Lightning was seen during the evening on the 5th, the 21st, the 22nd, the 23rd, the 24th, the 25th, the 26th, and the 30th.

A thunderstorm passed from W round by N towards E between 10 a. and 4 p. on the 31st. It reached its greatest intensity (8^s) at 3^h 5^m p.

The total distance traversed by, as well as the duration and average velocity of winds from different quarters were as follows:—

<i>Direction.</i>	<i>Total Distance.</i>	<i>Duration.</i>	<i>Velocity.</i>
	Miles.	Hours.	Miles per hour.
N	287	23	12.5
NE	460	27	17.0
E	7682	447	17.2
SE	826	70	11.8
S	514	61	8.4
SW	464	43	10.8
W	269	26	10.3
NW	230	27	8.5
Calm	11	20	0.5

TABLE I.

BAROMETRIC PRESSURE FOR THE MONTH OF MAY, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.
May 1, ...	29.918	29.911	29.906	29.909	29.926	29.947	29.960	29.981	29.997	29.995	29.984	29.969	29.952	29.931	29.920	29.898	29.905	29.920	29.925	29.938	29.956	29.962	29.945	29.930	29.941
" 2, ...	.912	.901	.901	.898	.895	.925	.941	.957	.971	.967	.958	.948	.929	.902	.871	.873	.884	.892	.891	.911	.925	.937	.948	.933	.920
" 3, ...	.914	.895	.885	.878	† .884	* .900	* .912	* .929	* .940	.939	.926	.923	.895	.863	.856	.836	.834	.842	.845	.855	.878	.891	.898	.895	.888
" 4, ...	.882	.864	.848	.843	.846	.850	.870	.891	.903	.904	.892	.889	.854	.828	.809	.799	.786	.784	.797	.814	.822	.829	.816	.812	.843
" 5, ...	.794	.778	.764	.759	.762	.779	.783	.795	.810	.803	.790	.774	.753	.719	.703	.691	.685	.691	.706	.720	.733	.726	.729	.727	.749
" 6, ...	.716	.696	.695	.693	.712	.723	.749	.765	.776	.787	.790	.779	.765	.750	.740	.727	.737	.744	.753	.776	.795	.808	.811	.803	.754
" 7, ...	.799	.795	.793	.791	.793	.819	.825	.834	.855	.854	.860	.857	.836	.810	.799	.788	.795	.822	.832	.837	.851	.856	.854	.839	.825
" 8, ...	.819	.808	.814	.810	.822	.839	.847	.866	.863	.864	.859	.850	.828	.811	.801	.798	.797	.809	.812	.831	.830	.851	.846	.824	.829
" 9, ...	.814	.813	.818	.809	.829	.828	.846	.852	.858	.860	.854	.858	.837	.833	.808	.797	.805	.800	.813	.829	.845	.841	.836	.825	.829
" 10, ...	.809	.799	.793	.803	.803	.816	.832	.839	.849	.849	.838	.819	.801	.774	.747	.744	.743	.746	.757	.781	.791	.796	.794	.793	.797
" 11, ...	.772	.753	.733	.736	.745	.765	.779	† .786	† .795	.793	.787	.769	.747	.732	.716	.703	.698	.701	.712	.725	.732	.748	.746	.731	.746
" 12, ...	.723	.719	.715	.713	.724	.746	.767	.790	.801	.807	.786	.765	.754	.748	.735	.713	.720	.732	.726	.744	.763	.778	.781	.779	.751
" 13, ...	.764	.744	.723	.723	.726	.757	.777	.801	.807	.808	.797	.796	.771	.750	.732	.713	.708	.734	.754	.777	.779	.795	.794	.777	.763
" 14, ...	.776	.760	.754	.768	.772	† .787	* .800	* .814	.823	.826	.815	.801	.785	.781	.770	.753	.766	.779	.797	.825	.838	.858	.859	.840	.798
" 15, ...	.829	.824	.813	.822	.818	.829	.842	.853	.855	.852	.837	.828	.810	.806	.786	.780	.787	.792	.797	.808	.818	.823	.824	.825	.819
" 16, ...	.820	.808	.803	.806	.806	.818	.814	.812	.833	.837	.828	.812	.792	.775	.753	.746	.742	.745	.750	.759	.770	.783	.773	.760	.789
" 17, ...	.746	.737	.721	.730	.739	.755	.772	.784	.797	.804	.793	.778	.752	.733	.724	.713	.706	.710	.717	.729	.749	.758	.765	.764	.749
" 18, ...	.756	.747	.741	.751	.759	.775	.790	.811	.820	.822	.809	.791	.766	.748	.737	.726	.731	.725	.735	.745	.773	.796	.794	.791	.768
" 19, ...	.785	.773	.766	.766	.771	.774	.791	.811	.828	.832	.831	.822	.801	.787	† .771	.754	.747	.752	.756	.765	.779	.788	.788	.782	.784
" 20, ...	.778	.758	.755	.764	.778	.795	.804	.812	.826	.837	.828	.816	.799	.773	.757	.741	.739	.740	.752	.772	.784	.794	.793	.786	.783
" 21, ...	.773	.762	.764	.772	.786	.803	.813	.825	.836	.839	.842	.821	.803	.784	.762	.743	.743	.756	.770	.796	.803	.815	.822	.819	.794
" 22, ...	.807	.800	.796	.810	.833	.866	.898	.904	.908	.913	.919	.907	.898	.881	.864	.851	.841	.835	.837	.851	.860	.861	.855	.856	.860
" 23, ...	.853	.836	.839	.836	.829	.830	.835	.834	.849	.842	.828	.820	.789	.767	.739	.720	.715	.719	.734	.747	.750	.765	.768	.753	.792
" 24, ...	.740	.724	.729	.734	.738	.755	.773	.782	.785	.783	.774	.758	.740	.718	.694	.687	.685	.690	.708	.732	.737	.757	.756	.746	.739
" 25, ...	.734	.730	.727	.730	.748	.766	.787	.799	.804	.811	.801	.792	.777	.761	.757	.744	.744	.755	.764	.787	.800	.821	.820	.814	.774
" 26, ...	.802	.782	.786	.787	.791	.807	.826	.838	.853	.854	.851	.845	.829	.814	.796	.781	.779	.796	.816	.838	.856	.869	.868	.857	.822
" 27, ...	.833	.816	.799	.815	.831	* .845	* .860	* .868	* .877	.878	.882	.872	.855	.840	.831	.816	.812	.819	.841	.852	.865	.876	.869	.858	.846
" 28, ...	.837	.826	.832	.831	.842	.858	.868	.882	.894	.895	.896	.888	.881	.854	.838	.816	.806	.815	.827	.848	.862	.877	.876	.866	.855
" 29, ...	.839	.822	.810	.808	.809	.823	.846	.866	.858	.852	.846	.836	.820	.796	.774	.755	.754	.761	.778	.789	.793	.796	.778	.807	
" 30, ...	.759	.751	.746	.744	.750	.752	.765	.765	.776	.773	.765	.749	.731	.706	.678	.664	.668	.676	.689	.710	.717	.736	.733	.723	.730
" 31, ...	.707	.707	.693	.687	.687	.690	.712	.717	.722	.723	.708	.698	.706	.691	.673	.672	.671	.658	.654	.673	.690	.697	.704	.700	.693
Hourly Means, }	... 29.800	29.788	29.783	29.785	29.792	29.807	29.822	29.831	29.844	29.845	29.838	29.827	29.808	29.789	29.772	29.759	29.759	29.766	29.775	29.792	29.805	29.816	29.815	29.806	29.801

* Interpolated.

† Approximate.

TABLE II.
TEMPERATURE FOR THE MONTH OF MAY, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means	Max.	Min.
May 1.....	68.7	69.1	68.1	67.6	67.8	68.8	69.6	71.2	71.9	72.0	72.6	73.5	72.8	72.8	73.0	71.1	70.3	69.6	69.6	69.6	69.6	69.2	69.2	70.3	73.5	67.6	
" 2.....	69.3	69.3	69.0	68.6	68.1	68.4	68.8	69.2	69.4	69.4	70.8	71.4	72.1	72.1	71.4	70.4	70.1	69.9	69.5	69.7	69.9	70.0	70.0	70.4	69.9	72.2	68.1
" 3.....	70.9	70.8	70.5	70.4	70.4	70.6	71.0	71.9	72.2	71.9	71.9	71.3	72.5	72.0	72.2	71.8	71.3	70.9	70.7	70.9	71.0	71.1	71.2	71.3	72.9	70.4	
" 4.....	71.3	71.2	70.8	70.4	70.5	70.7	71.5	72.3	74.0	74.9	76.7	78.2	77.6	77.0	76.6	75.5	74.8	74.0	73.3	72.9	72.7	72.7	72.9	73.6	78.2	70.2	
" 5.....	73.0	72.8	72.1	71.8	71.6	71.8	72.8	73.6	74.9	76.5	76.7	77.9	77.5	75.9	78.4	79.1	77.2	76.4	75.7	74.8	74.3	72.9	72.2	71.2	74.6	80.8	71.2
" 6.....	70.7	69.9	69.5	69.6	69.0	67.9	68.0	68.3	68.7	69.4	70.6	72.7	73.5	73.7	73.2	74.4	73.5	72.8	72.1	71.9	71.8	71.0	70.1	69.6	71.0	76.0	67.8
" 7.....	68.2	67.9	67.5	66.7	65.9	66.3	68.7	69.7	72.5	71.2	71.3	71.2	69.2	69.5	69.8	69.2	68.9	68.9	68.9	69.1	69.4	69.5	69.3	68.9	69.1	72.5	65.8
" 8.....	68.4	68.0	67.8	66.8	66.2	66.1	67.4	68.2	69.3	69.9	70.1	71.6	70.8	72.0	71.1	70.6	70.3	69.9	69.4	69.4	69.7	69.9	69.8	69.8	69.3	72.0	66.0
" 9.....	69.6	69.4	68.8	68.3	68.2	68.5	69.2	70.5	70.9	71.3	71.3	71.9	72.0	72.3	72.5	72.9	72.2	71.3	71.5	71.4	71.6	71.8	71.8	72.0	70.9	73.7	68.2
" 10.....	70.9	70.4	69.5	69.0	69.5	69.7	70.1	69.8	70.3	69.9	70.0	70.6	71.3	71.9	71.9	72.3	72.6	72.7	72.9	73.1	72.0	72.0	72.3	72.7	71.1	73.3	69.0
" 11.....	72.9	73.0	72.6	73.9	74.5	74.6	74.8	75.9	76.0	76.5	76.9	76.2	77.1	77.1	78.0	78.0	76.6	76.0	75.3	75.4	75.5	75.8	75.6	75.2	75.6	78.3	72.6
" 12.....	75.0	74.8	74.6	74.0	73.7	73.6	74.4	77.1	76.9	76.5	77.6	77.0	77.0	77.0	76.9	75.9	75.7	74.9	74.3	74.6	74.9	74.6	74.5	74.5	75.3	78.3	73.6
" 13.....	74.5	73.8	73.7	73.7	73.4	73.3	74.3	75.8	76.9	76.9	77.6	78.9	79.7	78.1	77.6	77.9	77.4	76.9	75.8	75.5	75.0	75.1	74.9	74.8	75.9	79.7	73.3
" 14.....	74.9	74.9	74.7	74.8	74.6	74.9	75.0	76.5	76.9	78.2	79.1	79.9	79.0	78.6	78.8	77.5	77.7	76.9	75.7	74.5	74.0	73.8	73.7	76.2	79.9	73.7	
" 15.....	73.9	73.4	73.2	72.8	72.7	72.2	71.9	71.8	72.5	73.9	74.4	74.8	75.5	75.8	76.0	76.0	74.9	74.6	74.1	74.1	74.1	74.2	73.9	73.9	73.9	76.3	71.5
" 16.....	72.8	72.9	73.1	73.0	72.7	72.8	73.4	74.0	74.2	76.9	76.6	77.3	77.2	78.1	77.6	77.0	76.1	75.3	75.1	74.3	74.2	74.2	74.9	75.4	75.0	78.9	72.3
" 17.....	75.7	75.7	75.5	75.5	75.1	75.4	76.7	78.1	79.3	80.0	81.2	83.0	85.0	84.8	83.1	82.6	81.3	79.8	78.3	77.9	77.3	77.1	76.7	76.3	78.8	85.0	75.1
" 18.....	76.4	76.3	76.9	77.1	76.9	77.4	78.9	80.1	81.9	83.0	83.7	85.0	85.1	84.9	84.7	82.8	82.2	80.8	80.1	80.0	80.0	80.0	79.7	79.6	80.6	85.1	76.2
" 19.....	79.8	79.8	79.7	79.5	79.5	79.8	80.7	81.8	83.1	83.8	84.8	85.8	85.0	84.2	83.9	83.7	82.7	81.5	80.3	79.5	79.1	79.0	78.6	78.7	81.4	85.8	78.6
" 20.....	78.8	78.8	79.0	79.0	78.9	78.5	78.9	81.3	82.7	84.0	85.0	84.6	85.9	86.5	86.0	85.2	82.7	81.9	81.0	80.8	80.5	80.3	79.8	79.9	81.7	86.7	78.3
" 21.....	79.7	79.3	79.1	78.7	78.3	78.7	80.1	81.0	81.7	83.0	84.2	85.8	85.2	85.0	85.7	86.1	84.5	83.2	80.9	80.1	79.3	79.0	78.4	81.5	86.1	78.2	
" 22.....	77.6	77.9	78.5	76.7	76.1	75.7	75.7	75.4	76.0	75.5	75.2	75.7	76.3	76.0	76.7	76.4	76.2	75.5	75.0	75.6	76.2	76.3	76.1	75.8	76.2	78.5	75.0
" 23.....	75.4	75.0	74.6	74.2	73.9	74.0	75.0	76.9	79.3	80.3	80.6	82.0	81.6	80.5	81.6	81.2	80.8	80.0	77.1	76.7	76.6	77.1	76.8	77.0	77.8	82.0	73.7
" 24.....	77.1	77.2	76.9	76.7	76.2	77.0	78.7	80.0	82.0	82.8	83.2	84.0	85.8	86.9	85.9	85.6	82.8	80.9	80.5	79.7	79.5	79.2	78.6	78.2	80.6	86.9	76.1
" 25.....	77.0	77.5	77.4	77.8	78.0	78.2	80.0	80.0	81.0	80.2	81.0	81.0	81.2	81.8	79.9	79.7	79.2	79.0	78.5	78.3	78.1	77.7	77.7	79.1	84.2	77.0	
" 26.....	77.0	77.0	76.9	76.3	76.3	76.1	77.3	77.8	77.8	79.1	79.0	80.0	81.1	79.0	78.6	78.3	78.1	77.3	77.4	77.4	77.7	77.7	77.4	77.9	81.1	76.0	
" 27.....	77.1	76.8	76.6	76.1	75.7	75.6	75.9	77.0	77.4	77.0	77.1	77.4	77.6	77.3	77.0	76.0	75.6	75.4	75.3	75.2	75.2	75.2	75.2	75.2	76.2	75.2	
" 28.....	75.0	74.5	74.3	74.3	74.1	74.2	75.3	75.5	77.0	77.3	76.7	78.0	77.3	77.7	78.6	77.7	77.2	76.1	76.0	76.0	76.2	76.4	76.0	76.2	79.2	73.3	
" 29.....	75.8	75.5	75.4	75.6	75.6	75.7	76.0	76.0	76.3	78.0	79.0	79.2	80.0	79.5	78.7	78.2	77.5	76.8	76.4	76.5	76.6	77.0	80.6	75.2			
" 30.....	76.6	76.4	76.1	76.5	77.0	77.4	78.9	80.5	81.4	80.0	81.5	86.0	88.3	87.6	83.7	83.4	81.2	80.2	80.3	79.9	79.6	80.7	88.3	75.9			
" 31.....	80.1	80.3	80.2	80.4	80.5	81.0	81.2	81.8	82.3	82.8	83.7	83.4	82.1	79.3	79.5	76.1	76.2	76.6	76.9	76.8	76.8	76.9	76.9	79.5	84.1	75.0	
Hourly Means,.....	74.3	74.2	74.0	73.7	73.6	73.7	74.5	75.4	76.4	76.9	77.4	78.3	78.4	78.2	78.1	77.5	76.8	76.1	75.4	75.2	75.1	75.1	74.9	74.8	75.7	79.6	72.9

TABLE III.

TEMPERATURE OF EVAPORATION AND RADIATION, FOR THE MONTH OF MAY, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.	Sun.	Rad.	
May 1,.....	65.2	64.3	64.5	64.0	63.4	63.9	65.5	64.7	66.8	64.5	62.1	63.5	63.2	64.0	64.3	64.4	64.8	64.7	65.3	65.7	66.3	66.4	66.4	66.4	64.8	131.7	60.4
" 2,.....	65.6	65.9	65.9	65.5	65.0	65.0	64.2	64.1	64.0	63.3	64.1	64.8	66.3	66.2	66.0	66.0	65.9	65.8	65.7	66.2	66.2	66.2	66.1	66.4	65.4	136.7	67.2
" 3,.....	66.0	66.2	66.5	66.4	67.2	67.3	67.9	68.1	68.4	68.4	68.6	68.7	69.0	68.9	68.7	68.7	69.0	69.0	69.0	69.1	68.6	68.5	68.8	68.7	68.2	125.5	68.4
" 4,.....	68.4	68.0	68.0	68.2	68.6	69.1	69.4	70.4	71.2	71.9	72.9	74.0	73.6	73.7	73.7	73.2	72.7	72.3	72.1	72.0	72.0	72.1	72.1	72.2	71.3	145.9	68.4
" 5,.....	72.2	72.1	71.7	71.3	71.2	71.4	71.9	72.5	73.1	73.5	73.7	74.0	74.0	73.1	74.0	73.6	73.2	72.5	72.3	72.7	73.0	71.8	70.5	69.4	72.4	142.7	70.9
" 6,.....	68.1	67.0	66.6	66.3	65.4	64.9	64.7	65.1	65.5	64.0	64.3	64.2	64.5	64.6	65.3	64.3	63.2	62.7	62.9	60.6	59.5	58.1	57.6	57.0	63.6	137.6	66.5
" 7,.....	56.7	55.9	55.5	55.9	55.7	56.3	58.1	*58.6	59.7	59.0	58.6	61.0	60.6	61.6	63.0	63.6	63.5	63.0	62.6	62.8	62.7	63.0	63.2	63.0	60.1	144.9	64.4
" 8,.....	63.1	62.4	61.9	62.0	61.9	61.4	60.5	60.9	+61.3	61.7	62.2	63.1	62.8	63.7	63.0	62.1	62.4	62.2	63.2	63.6	63.9	64.4	64.6	64.4	62.6	136.5	64.3
" 9,.....	65.0	64.5	63.9	63.4	63.0	63.2	63.9	64.0	64.1	65.0	65.2	66.2	66.2	67.1	67.2	65.9	66.2	66.0	67.4	67.9	68.2	69.1	69.4	69.3	65.9	134.7	65.8
" 10,.....	69.6	69.4	68.4	67.9	68.5	68.8	68.9	68.9	69.0	69.0	69.3	69.7	70.0	70.6	70.9	71.0	71.8	71.4	71.3	71.2	71.3	71.3	71.4	69.9	93.6	67.5	
" 11,.....	71.3	71.4	71.3	71.6	71.6	71.9	72.1	72.7	73.0	73.6	73.9	73.7	74.2	74.3	74.8	74.8	74.2	74.0	73.7	74.1	74.1	74.0	73.8	73.3	73.2	124.5	71.3
" 12,.....	73.2	73.1	73.0	72.6	72.4	72.6	72.6	73.2	74.5	74.7	74.4	75.0	74.6	74.3	74.0	74.0	74.0	73.9	73.7	73.8	73.9	73.8	73.7	73.7	73.7	142.0	72.7
" 13,.....	73.7	73.3	73.2	73.0	72.9	72.9	73.4	74.1	74.5	74.2	74.2	74.7	75.0	74.6	74.2	74.0	74.1	73.7	73.9	73.8	73.8	73.8	73.7	73.7	73.9	142.2	72.9
" 14,.....	74.0	74.0	73.7	73.8	73.8	73.7	73.7	74.3	74.3	73.9	74.7	74.2	73.8	73.0	73.7	73.8	73.6	72.9	72.3	71.9	71.6	71.6	71.0	73.3	153.3	72.9	
" 15,.....	70.9	70.9	70.6	70.6	70.6	70.4	70.0	69.6	69.9	70.5	70.7	71.0	71.4	71.5	71.6	71.9	71.8	71.6	71.5	71.6	71.7	71.7	71.4	71.6	71.0	143.3	70.4
" 16,.....	71.7	71.5	71.6	71.6	71.4	71.5	71.8	72.0	72.1	73.3	73.3	74.3	74.6	74.7	74.6	74.6	74.1	73.5	73.7	73.6	73.7	73.7	74.1	74.4	73.1	150.0	71.7
" 17,.....	74.6	74.5	74.3	74.3	74.1	73.9	74.9	75.5	75.8	75.6	74.7	76.6	76.5	74.9	75.6	75.8	74.8	74.7	74.7	74.7	74.6	74.6	74.4	74.3	74.9	144.9	72.7
" 18,.....	74.5	74.8	74.8	75.3	75.6	75.9	76.7	76.8	77.9	77.1	77.1	76.6	77.0	77.3	77.1	76.4	75.7	76.0	76.4	76.7	76.2	75.8	75.7	75.7	76.2	142.0	72.2
" 19,.....	76.0	75.9	75.6	75.7	75.8	76.1	76.7	76.7	77.1	77.6	77.7	77.6	77.4	77.2	77.3	76.8	77.0	76.5	76.3	76.4	76.0	76.6	76.6	76.6	76.2	144.2	75.2
" 20,.....	75.9	75.5	75.4	75.3	75.8	76.5	76.7	76.6	76.6	76.7	77.6	77.2	77.7	78.2	77.6	77.3	77.2	77.2	76.7	76.6	76.4	76.4	76.1	75.8	76.6	146.3	75.8
" 21,.....	76.0	76.2	75.8	75.8	76.8	77.4	77.8	76.7	77.2	77.1	77.8	77.6	77.5	77.6	76.6	77.6	77.3	77.1	76.9	76.7	76.7	76.5	76.7	76.9	76.9	144.2	75.0
" 22,.....	76.2	76.4	76.6	74.4	74.3	73.8	73.5	73.6	72.9	72.8	72.7	73.2	72.6	73.1	73.2	73.0	73.2	73.1	73.2	73.4	73.8	73.7	73.4	73.1	73.7	111.3	73.9
" 23,.....	72.9	72.4	72.3	71.9	71.5	71.6	72.0	72.9	73.9	74.3	74.2	75.1	75.4	74.5	74.7	75.1	74.8	74.6	73.9	73.4	73.5	73.8	73.8	74.2	73.6	140.9	72.4
" 24,.....	74.7	74.7	74.6	74.9	74.6	75.1	76.0	76.2	76.6	76.0	75.9	76.3	75.9	76.5	76.1	76.1	74.9	75.2	75.7	75.6	75.8	76.2	76.1	75.7	143.0	71.6	
" 25,.....	73.9	74.3	74.5	74.1	74.1	73.8	74.8	74.0	74.1	74.6	74.8	74.8	75.6	74.7	75.6	75.3	74.9	73.7	73.6	73.8	74.7	75.2	74.2	74.3	74.5	142.0	74.4
" 26,.....	74.0	74.0	74.0	73.6	73.6	73.2	73.8	73.6	73.6	74.5	74.2	74.7	75.4	74.4	74.4	74.6	74.6	74.6	74.6	74.7	74.7	75.0	74.5	74.2	74.2	139.9	74.3
" 27,.....	74.0	73.8	73.4	73.2	73.0	72.5	72.4	72.6	72.8	72.2	71.9	72.1	72.4	72.4	71.6	71.4	71.3	70.9	70.1	69.8	69.7	69.9	69.8	70.6	71.8	128.5	74.5
" 28,.....	70.3	69.6	69.8	69.4	69.6	69.5	69.5	69.6	69.6	69.6	69.9	71.4	70.9	70.6	70.7	70.8	70.9	70.7	71.6	72.3	72.6	72.6	72.8	72.7	70.7	142.1	71.0
" 29,.....	72.0	72.1	72.4	72.3	72.4	72.6	73.3	73.2	73.1	73.3	74.2	74.3	74.4	74.2	74.0	73.9	74.2	74.1	74.0	74.1	74.3	74.7	74.9	74.7	73.6	148.3	73.4
" 30,.....	74.4	74.5	74.6	74.8	75.4	76.0	76.6	77.4	78.3	77.5	76.9	77.0	76.9	77.4	75.6	76.3	75.1	75.9	76.0	76.1	76.0	76.0	76.2	76.1	146.6	75.6	
" 31,.....	76.3	76.8	76.7	*76.8	*77.0	*77.3	*77.5	*77.9	*78.2	78.3	78.5	78.6	77.8	74.6	75.6	73.9	74.1	74.3	74.2	74.4	74.3	74.7	74.7	74.6	76.1	121.1	73.7
Hourly Means,	71.3	71.1	71.0	70.8	70.9	71.0	71.3	71.5	71.9	71.8	71.9	72.4	72.5	72.3	72.4	72.1	71.9	71.9	71.9	71.9	71.9	72.0	71.9	71.8	71.7	137.8	71.0

* Interpolated.

† Approximate.

TABLE IV.

TABLE IV.
AN HOURLY AND DAILY RELATIVE HUMIDITY AND TENSION OF AQUEOUS VAPOUR
FOR THE MONTH OF MAY, 1886.

OUR.	HOURLY MEAN.		DATE.	DAILY MEAN.	
	Humidity.	Tension.		Humidity.	Tension.
			1886.		
a	86	0.735	May 1,.....	73	0.541
"	86	0.728	" 2,.....	77	0.567
"	86	0.727	" 3,.....	85	0.649
"	86	0.724	" 4,.....	89	0.737
"	87	0.729	" 5,.....	89	0.767
"	87	0.731	" 6,.....	64	0.490
"	85	0.732	" 7,.....	56	0.401
"	81	0.727	" 8,.....	67	0.480
"	79	0.730	" 9,.....	76	0.572
"	77	0.719	" 10,.....	94	0.716
"	75	0.718	" 11,.....	88	0.787
oon.	74	0.725	" 12,.....	93	0.811
1 p	74	0.728	" 13,.....	91	0.783
2 "	74	0.722	" 14,.....	86	0.721
3 "	75	0.727	" 15,.....	86	0.790
4 "	76	0.731	" 16,.....	90	0.814
5 "	78	0.733	" 17,.....	82	0.845
6 "	81	0.734	" 18,.....	80	0.852
7 "	84	0.743	" 19,.....	80	0.848
8 "	85	0.746	" 20,.....	79	0.864
9 "	85	0.748	" 21,.....	81	0.799
0 "	86	0.752	" 22,.....	88	0.773
1 "	86	0.750	" 23,.....	81	0.824
adt.	86	0.748	" 24,.....	78	0.793
			" 25,.....	80	0.797
			" 26,.....	83	0.722
			" 27,.....	79	0.678
			" 28,.....	75	0.784
			" 29,.....	84	0.840
			" 30,.....	80	0.856
			" 31,.....	85	
Mean,	82	0.733	Mean,.....	81	0.733

TABLE V.
DURATION OF SUNSHINE.

TABLE VI.

RAINFALL FOR THE MONTH OF MAY, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Sums.
May 1,	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·005
" 2,	0·005	...	...	...	...	...	...
" 3,	0·005
" 4,	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" 5,	0·035	0·010	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·005
" 6,	0·085	0·010	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·050
" 7,	0·005	...	...	...	...	...	...	...	...	...	...	...	...	0·005
" 8,
" 9,
" 10,	0·025	0·080	0·105	0·120	0·105	0·045	0·070	0·140	0·085	0·055	0·115	0·095	0·030	0·040	0·070	0·040	0·005	0·005	...	0·010	0·020	0·005	...	1·265	
" 11,	0·010	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·010
" 12,
" 13,
" 14,
" 15,	0·005	...	0·005	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·015
" 16,
" 17,
" 18,	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·005
" 19,
" 20,
" 21,
" 22,	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·005
" 23,
" 24,
" 25,	0·045	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·045
" 26,
" 27,
" 28,
" 29,	0·005	0·010	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·015
" 30,	0·315	0·010	0·010	0·005	...	...	...	...	...	...	...	...
" 31,	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·345
Sums,.....	0·080	0·080	0·105	0·135	0·115	0·090	0·085	0·150	0·095	0·055	0·115	0·095	0·035	0·040	0·385	0·050	0·015	0·010	0·005	0·010	0·020	0·005	...	1·775	

TABLE VII.

DIRECTION AND VELOCITY OF THE WIND FOR THE MONTH OF MAY, 1886.

TABLE VIII.
MEAN HOURLY COMPONENTS AND MEAN DIRECTION OF THE WIND, FOR MAY, 1886.

Hour.	Components (miles per hour).							Dir.
	N	E	S	W	+N-S	+E-W		
1 a.	1.4	10.7	1.7	0.7	-0.3	+ 10.0		E
2 "	2.0	9.3	1.5	0.8	+0.5	8.4		E
3 "	1.2	9.9	1.4	1.1	-0.2	8.9		E
4 "	2.1	10.2	2.0	0.9	+0.1	9.2		E
5 "	1.8	10.0	1.6	1.0	+0.2	9.0		E
6 "	1.3	10.5	1.4	1.1	-0.1	9.4		E
7 "	0.8	11.4	1.5	1.3	0.7	10.1		E
8 "	1.2	12.0	1.9	1.1	0.7	10.8		E
9 "	1.4	12.3	1.9	1.4	-0.5	10.9		E
10 "	1.5	12.4	1.4	2.3	+0.2	10.2		E
11 "	0.8	13.1	1.8	2.6	-1.0	10.5		E
Noon.	0.4	13.4	1.8	2.1	1.4	11.3		E
1 p.	0.8	12.7	2.6	2.3	1.8	10.4		E
2 "	0.6	12.9	2.6	1.3	2.0	11.6		E
3 "	0.6	12.9	3.3	0.7	2.7	12.3		E
4 "	0.3	12.8	3.5	0.5	3.2	12.4		E
5 "	0.4	12.0	2.7	0.3	2.4	11.7		E
6 "	0.7	11.5	2.1	0.1	1.4	11.4		E
7 "	0.6	11.3	1.8	0.2	1.2	11.1		E
8 "	0.7	11.0	2.1	0.2	1.4	10.8		E
9 "	0.5	11.3	1.4	0.2	0.9	11.1		E
10 "	0.9	11.5	1.1	0.6	0.3	10.9		E
11 "	1.2	10.8	1.3	0.8	-0.0	10.0		E
Midt.	1.5	10.9	1.3	0.7	+0.2	10.2		E
Mean,.....	1.0	11.5	1.9	1.0	-0.9	+ 10.5		E

TABLE IX.

DIRECTION AND FORCE OF THE WIND AT VICTORIA PEAK, AND SEA DISTURBANCES.

DATE.	4 a.			10 a.			4 p.			10 p.	
	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.
1886.											
May 1,.....	1	E	5	3	E	5	3	E	6
" 2,.....	3	E	6	3	E	5	5	E	6
" 3,.....	2	E	4	3	SE	4	3	SE	4
" 4,.....	1	SE	5	3	SE	4	0	SE	4
" 5,.....	0	S	4	0	S	4	0	SE	5
" 6,.....	0	N	5	0	N	4	2	N	4
" 7,.....	2	E	5	2	E	4	2	E	4
" 8,.....	E	5	3	E	5	3	E	6
" 9,.....	4	E	6	4	E	5	3	E	6
" 10,.....	3	ESE	6	3	SE	6	3	SE	7
" 11,.....	2	SE	7	2	S	6	1	SSE	7
" 12,.....	0	S	5	0	S	4	0	SE	4
" 13,.....	0	S	3	0	SSE	3	0	SSE	4
" 14,.....	0	S	3	0	S	4	1	E	6
" 15,.....	4	E	6	4	E	5	3	E	4
" 16,.....	1	ESE	4	2	SE	3	1	SE	3
" 17,.....	0	S	3	0	SW	4	0	SW	3
" 18,.....	0	S	4	0	S	5	1	S	5
" 19,.....	1	S	5	1	S	5	1	S	5
" 20,.....	1	S	5	1	S	5	1	S	5
" 21,.....	0	SSW	3	1	SW	4	1	E	5
" 22,.....	4	E	6	5	E	5	4	E	5
" 23,.....	3	ESE	2	2	WNW	3	0	W	3
" 24,.....	0	WNW	3	1	SW	4	2	S	4
" 25,.....	2	SE	4	1	SE	4	1	SE	4
" 26,.....	3	E	5	3	E	4	3	E	4
" 27,.....	4	E	5	4	ESE	4	4	ESE	5
" 28,.....	4	ESE	6	3	ESE	5	3	ESE	5
" 29,.....	3	SE	5	2	ESE	4	2	ESE	4
" 30,.....	0	S	5	1	SW	6	1	SSW	5
" 31,.....	0	SSW	6	2	SW	4	2	SW	4
Mean,.....	1.6	E 38° S	4.7	1.9	E 54° S	4.4	1.8	E 37° S	4.5

TABLE X.
VICTORIA PEAK.

E.	BAROMETER.			TEMPERATURE.							
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	Sun.	Max.	Min.	Rad.	
1.	ins.	ins.	ins.	°	°	°	°	°	°	°	°
2.	28.243	28.191	28.183	66.1	67.3	63.3	122.0	69.8	62.7	59.1	
3.	.207	.137	.161	64.7	65.5	63.3	137.0	67.8	61.8	60.2	
4.	.200	.126	.148	65.1	66.5	66.7	107.0	69.2	63.3	61.1	
5.	.179	.116	28.077	67.5	69.3	68.3	132.0	69.7	62.7	63.3	
6.	.101	.017	27.997	69.3	70.9	65.3	139.6	71.5	65.3	59.3	
7.	.051	.022	28.057	65.9	67.5	65.5	133.0	67.9	63.7	59.1	
8.	.094	.055	.045	64.3	64.1	62.3	134.0	67.0	62.3	58.1	
9.	.108	.061	.096	63.9	65.7	61.3	134.0	67.6	61.3	58.1	
10.	.111	.069	.096	64.1	66.3	64.5	134.6	66.8	61.3	62.1	
11.	.109	.047	.046	65.3	66.3	67.9	86.8	68.3	64.5	65.1	
12.	.082	.015	.037	68.4	70.1	69.3	117.0	71.4	67.7	68.2	
13.	.096	.036	.068	69.7	71.1	70.3	131.2	72.2	69.3	68.3	
14.	.112	.043	.070	70.7	73.1	71.4	115.0	73.8	69.7	67.1	
15.	.113	.071	.088	71.7	72.3	68.3	138.0	74.5	68.3	67.3	
16.	.123	.075	.075	68.5	69.4	67.5	108.0	70.0	67.5	63.1	
17.	.113	.068	.087	69.9	70.9	70.3	138.0	73.2	67.5	66.2	
18.	.120	.046	.062	71.9	74.3	72.5	142.0	75.2	67.1	67.1	
19.	.124	.068	.075	73.4	74.3	73.9	129.6	76.0	72.5	71.1	
20.	.132	.092	.091	73.5	75.1	73.3	137.0	75.4	73.3	69.5	
21.	.135	.076	.083	73.5	75.7	73.5	133.2	76.0	72.7	71.3	
22.	.147	.080	.128	74.4	75.9	74.1	137.1	76.4	73.5	69.3	
23.	.184	.140	.122	72.5	72.3	71.5	105.0	74.1	71.5	67.1	
24.	.148	.100	.069	73.3	77.3	73.9	137.0	77.8	71.3	68.3	
25.	.093	.031	.055	74.5	76.3	73.1	143.0	78.0	72.7	69.5	
26.	.111	.051	.069	74.3	75.4	73.9	142.0	76.4	72.7	68.1	
27.	.133	.094	.124	72.9	74.5	72.7	133.0	75.4	72.1	68.1	
28.	.155	.115	.120	72.1	70.4	68.4	98.8	73.5	65.8	66.7	
29.	.164	.116	.126	67.6	70.7	68.4	131.1	73.8	65.1	64.2	
30.	.128	.076	28.069	69.5	73.4	70.9	127.4	75.2	68.4	67.5	
31.	.067	28.001	27.970	71.7	73.6	71.9	146.4	76.4	70.8	70.3	
mean, .....	.014	27.990	28.003	74.5	72.3	71.7	94.6	75.7	66.8	67.2	
mean,	28.126	28.072	28.081	69.8	71.2	69.3	127.2	72.8	67.6	65.5	

TABLE XI.
HUMIDITY AT THE OBSERVATORY AND AT VICTORIA PEAK.

DATE. 886.	RELATIVE HUMIDITY.						TENSION OF AQUEOUS VAPOUR.					
	OBSERVATORY.			VICTORIA PEAK.			OBSERVATORY.			VICTORIA PEAK.		
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.
1.	64	67	84	87	71	83	0.507	0.517	0.607	0.555	0.475	0.488
2.	70	78	81	86	88	90	.502	.581	.594	.533	.556	.525
3.	83	83	88	97	99	97	.649	.656	.665	.601	.645	.642
4.	86	89	95	99	95	95	.743	.788	.777	.667	.681	.658
5.	86	76	95	95	93	95	.787	.756	.766	.681	.697	.591
6.	73	55	42	92	83	88	.525	.469	.314	.584	.564	.556
7.	41	73	68	71	84	84	.339	.515	.490	.432	.503	.475
8.	60	59	73	80	72	86	.442	.446	.532	.474	.458	.470
9.	70	67	87	88	79	80	.535	.545	.677	.528	.516	.485
10.	91	94	97	97	99	95	.665	.743	.759	.605	.610	.649
11.	86	85	92	100	97	100	.791	.821	.817	.696	.715	.717
12.	90	91	96	99	96	97	.832	.815	.824	.720	.732	.720
13.	87	82	95	97	93	95	.810	.788	.827	.738	.760	.729
14.	82	83	89	96	86	95	.781	.781	.746	.747	.680	.658
15.	83	82	88	95	95	99	.702	.728	.745	.659	.687	.667
16.	84	89	98	97	97	95	.773	.826	.826	.710	.735	.705
17.	80	72	89	97	90	89	.828	.801	.824	.761	.773	.715
18.	75	73	81	97	95	93	.853	.824	.836	.796	.809	.774
19.	73	73	89	99	94	95	.841	.852	.876	.819	.823	.782
20.	71	68	82	96	93	95	.821	.832	.858	.795	.824	.787
21.	75	67	90	95	93	92	.853	.833	.889	.812	.838	.775
22.	88	85	88	95	95	89	.776	.776	.797	.757	.771	.697
23.	71	74	85	90	82	84	.769	.790	.791	.743	.771	.745
24.	74	63	87	95	86	91	.833	.774	.864	.810	.783	.766
25.	76	80	86	88	88	91	.782	.819	.836	.746	.774	.750
26.	80	82	86	93	90	93	.793	.800	.830	.748	.774	.750
27.	78	79	76	95	90	95	.727	.709	.661	.751	.671	.656
28.	66	70	82	92	85	88	.622	.663	.750	.624	.642	.614
29.	79	81	90	99	93	84	.758	.781	.830	.715	.764	.639
30.	89	69	81	98	93	97	.911	.808	.841	.767	.770	.761
31.	81	90	91	100	90	84	.909	.809	.833	.851	.717	.654
mean,	77	77	86	94	90	91	0.724	0.731	0.751	0.691	0.695	0.663

TABLE XII.

AMOUNT AND CLASSIFICATION OF CLOUDS AND DIRECTION WHENCE COMING.

DATE.	1 a.			4 a.			7 a.			10 a.		
	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction
1886.												
May 1,	0	...	...	3	cum.	E	2	e-cum. cum.	E	1	e-cum. cum.	W
" 2,	2	cum.	SSE	4	cum-nim.	E	9	cum. cum-nim.	E	9	cum. cum.	E
" 3,	9	cum.	E	8	cum-nim.	E	10	cum-nim.	E	10	cum-nim.	E
" 4,	5	cum.	SE	8	cum-nim.	ESE	10	cum.	SE	9	cum.	S
" 5,	10	cum.	E	...	fog.	...	10	cum-nim.	SSE	10	sm-cum. cum.	SE
" 6,	10	cum.	W	9	nim.	...	10	str. nim.	NNE	10	str. cum-nim.	S
" 7,	6	cum.	W	0	...	...	7	e-str. sm-cum.	W WSW	10	sm-cum.	WS
" 8,	7	cum.	W	8	cum.	W	6	e-str.	W	4	e-str.	V
" 9,	6	cum.	ESE	7	cum.	E	7	sm-cum. cum.	N	4	e-cum. cum.	V
" 10,	10	nim.	...	10	nim.	E	10	nim.	...	10	nim.	E
" 11,	10	nim.	...	10	nim.	SE	10	cum-nim.	SSE	10	cum. cum-nim.	S
" 12,	10	cum.	SE	7	cum-nim.	S	10	cum. cum-nim.	WSW	10	cum. cum.	WS
" 13,	10	sm-cum. cum.	...	10	cum-nim.	...	9	cum.	SSW	10	sm-cum. cum.	S
" 14,	10	cum.	N	9	cum.	N	10	cum.	...	10	sm-cum. cum.	S
" 15,	10	cum-nim.	ESE	10	nim.	E	10	nim.	E	10	cum-nim.	E
" 16,	10	nim.	ESE	8	cum-nim.	E	10	cum-nim.	E	10	R-cum.	E
" 17,	9	cum-nim.	S	8	cum.	...	5	cum.	SSW	2	e-str. cum.	S
" 18,	3	cum.	S	10	cum-nim.	SSW	5	cum.	SW	3	cum.	WS
" 19,	8	cum.	SW	5	cum-nim.	SW	7	cum.	SW	4	e-cum. cum.	S
" 20,	7	cum.	S	4	cum.	S	3	cum.	SW	7	cum.	V
" 21,	7	cum.	SE	7	cum.	S	5	cum.	WSW	1	cum.	W
" 22,	7	cum-nim.	...	10	nim.	E	10	nim.	...	10	cum-nim.	...
" 23,	10	cum.	SE	6	nim.	NW	5	cum.	SW	6	e-str. cum.	V
" 24,	1	sm-cum.	...	2	cum.	...	8	e-cum. cum.	W	4	e-cum. cum.	W
" 25,	10	cum. nim.	WSW ESE	10	cum-nim.	ESE	6	e-cum. cum.	ESE	7	e-cum. cum.	W
" 26,	5	e-cum. cum-nim.	SW SE	8	cum.	ESE	10	e-cum. cum. nim.	SSW E	4	sm-cum. cum.	W
" 27,	6	cum.	SSE	7	nim.	E	10	cum-nim.	E	10	cum-nim. cum.	V
" 28,	10	nim.	...	9	cum-nim.	E	10	cum-nim.	E	9	R-cum. e-cum.	V
" 29,	2	cum.	NE	9	cum-nim.	E	10	cum. cum-nim.	ESE	8	sm-cum. cum.	V
" 30,	1	cum.	NE	9	cum.	S	10	cum-nim.	S	8	sm-cum. cum.	S
" 31,	10	cum-nim.	SSW	10	nim.	SW	10	cum. cum-nim.	W	10	e-str. cum-nim.	V
Mean,.....	7.1	...	...	7.5	...	...	8.2	...	...	7.4	...	...

TABLE XII,—Continued.

AMOUNT AND CLASSIFICATION OF CLOUDS AND DIRECTION WHENCE COMING.

E.	1 p.			4 p.			7 p.			10 p.			Daily and Monthly Means.
	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	
6.....	2	e-cum.	W	1	e. sm-cum.	NW SE	1	cum.	ESE	1	cum.	...	1.4
.....	8	e-cum. cum.	ESE	10	cum. cum-nim.	ESE E	9	cum.	ESE	9	cum.	ESE	7.5
.....	10	cum. nim.	ESE E	10	R-cum.	ESE	10	nim.	ESE	9	nim.	ESE	9.5
.....	5	cum.	SE	2	e. cum.	W SE	9	e-str. cum.	ESE	5	cum.	ESE	6.6
.....	10	sm-cum. cum.	W SSW	8	e-str. cum.	W WSW	10	str. cum.	WNW	7	str. cum.	W	9.3
.....	10	sm-cum. cum.	W NE	9	sm-cum.	W	10	cum.	W	10	cum.	WNW	9.7
.....	10	str. nim.	W	10	str. cum-nim.	ENE	10	str. cum.	E	10	str.	...	7.9
.....	7	e-str.	W	8	e-str. sm-cum. e-cum.	W WSW WNW	10	sm-cum.	W	9	sm-cum. cum.	W E	7.4
.....	8	e-cum. cum.	E	7	sm-cum. cum.	E W	10	cum-nim.	ESE	10	nim.	ESE	7.4
.....	10	nim.	E	10	nim.	SE	10	nim.	SE	10	nim.	SE	10.0
.....	10	cum.	SSE	10	cum.	SW	10	cum-nim.	SSE	10	cum.	WSW	10.0
.....	10	cum-nim.	WSW	10	cum-nim.	SSE W	8	cum.	WSW SE	10	cum-nim.	SSE SW	9.4
.....	10	cum-nim.	SSE	10	cum.	ESE	9	sm-cum.	W	9	cum.	SE	8.6
.....	9	sm-cum.	W	3	e-str. cum.	SW W	9	sm-cum.	W	9	e-cum. sm-cum.	W	8.8
.....	5	cum.	SSW	7	sm-cum. cum.	SSW ESE SSE	9	cum.	E	10	cum-nim.	E	10.0
.....	10	e-cum.	WSW	10	cum-cum.	ESE	10	cum, cum.	ESE	10	cum-cum.	ESE	7.2
.....	9	nim.	ESE	10	cum.	SSE ESE	1	sm-cum.	W	0	...	...	3.4
.....	2	e-str. cum.	W WSW	1	cum.	WSW	0	...	...	0	...	...	5.1
.....	4	cum.	WSW	3	cum.	SW	6	e. cum.	NW SW	7	cum.	SW	4.0
.....	4	cum.	SW	1	cum.	WSW	0	...	...	3	cum.	SW	4.0
.....	3	cum.	WSW	1	cum.	WSW	3	cum.	WSW	4	cum.	WSW	4.0
.....	2	cum.	WSW	1	e-str. cum.	WSW	2	e-str.	E	4	e-str.	NE	3.6
.....	10	cum-nim.	E	10	R-cum.	E	9	cum.	E	10	cum-nim.	ESE	9.5
.....	5	e-str. cum.	NE N	2	e-str.	...	0	...	...	0	...	...	4.3
.....	2	cum.	WNW	2	cum.	W	4	e-cum.	...	2	cum.	SSE	3.1
.....	6	cum.	WNW	3	cum.	w	4	e-cum.	WNW SE	2	cum-nim.	ESE	6.0
.....	3	cum.	ESE	3	cum.	s	4	cum.	WNW SE	4	cum.	NNE	5.1
.....	10	cum-nim.	ESE	10	cum-nim. e-cum.	E WSW	10	cum-nim.	E	9	cum-nim.	E	9.0
.....	10	cum.	SE	9	cum-cum.	WSW	6	cum.	E	10	cum.	ESE	9.1
.....	8	cum-nim.	E N	6	cum. e-cum.	E N	4	e-str.	N	1	cum.	...	6.0
.....	8	sm-cum.	SSE	6	cum.	...	4	str.	W	10	cum.	...	7.1
.....	10	sm-cum.	WSW	5	cum. cum.	SW SSW	6	sm-cum.	W	10	cum.	SW	9.9
.....	7.1	e-str. cum-nim.	W	10	nim.	SSW	10	str.	...	9	str-cum.	SW	7.1

TABLE XIII.
RAINFALL AT DIFFERENT STATIONS.

DATE	OBSERVATORY.		STONE CUTTERS' ISLAND.		VICTORIA P.
	Amount.	Duration.	Amount.	Amount.	
1886.	ins.	hrs.	ins.	ins.	ins.
May 1,.....	...	...	...	...	...
" 2,.....	...	2	...	...	...
" 3,.....	0.005	5	...	...	...
" 4,.....	0.005	...	...	...	...
" 5,.....	0.050	5	0.06	...	...
" 6,.....	...	...	...	...	0.15
" 7,.....	0.005	1	...	...	...
" 8,.....	...	...	...	...	...
" 9,.....	0.820	14	0.40	...	...
" 10,.....	0.455	19	0.10	...	0.65
" 11,.....	...	...	...	...	...
" 12,.....	...	...	...	...	...
" 13,.....	...	...	...	...	...
" 14,.....	0.015	4	...	...	...
" 15,.....	...	5	...	...	...
" 16,.....	...	1	...	...	...
" 17,.....	0.005	...	...	...	...
" 18,.....	...	...	...	...	...
" 19,.....	...	...	...	...	...
" 20,.....	...	...	...	...	...
" 21,.....	0.005	4	...	...	...
" 22,.....	...	2	...	...	...
" 23,.....	...	...	...	...	...
" 24,.....	0.045	1	...	...	...
" 25,.....	...	2	...	...	...
" 26,.....	...	1	...	...	0.07
" 27,.....	...	1	...	...	0.09
" 28,.....	0.015	2	...	...	...
" 29,.....	...	1	...	...	0.12
" 30,.....	0.005	1	...	...	...
" 31,.....	2.130	14	2.03	...	3.89
Total,.....	3.560	85	2.59	...	4.97

W. DOBERCK,
Government Astronomer

Hongkong Observatory, 21st June, 1886.

HONG KONG OBSERVATORY.

Weather Report for June, 1886.

In the *China Coast Meteorological Register*, based on information transmitted by the Great Northern and the Eastern Extension Telegraph Companies, which was daily published, is given a summary of the atmospheric circumstances in Luzon and along the Coast of China, and information concerning the weather in Nagasaki and Vladivostock. It contains also information concerning the first appearance and progress of typhoons.

Unusual visibility was noted on the 9th, the 11th, and the 15th.

Dew fell in the evening on the 8th, the 9th, during the night between the 15th, and the 16th, in the evening on the 16th, in the morning on the 18th, in the evening on the 19th, the 20th, and during the night between the 21st and the 22nd.

Rainbows were observed on the 28th.

Lunar halos were observed on the 9th, the 10th, the 15th, the 19th, the 21st and the 22nd.

Lunar coronas were observed on the 9th, the 10th, the 15th, the 20th, the 22nd and the 23rd.

Solar halos were observed on the 6th, the 10th and the 11th.

Faint thunder and lightning were noted on the 1st, and thunder was heard on the 2nd. Lightning was seen during the night between the 3rd and 4th, and between the 4th and 5th and in the morning on the 6th.

Thunder and lightning were noted during the night between the 10th and the 11th and a very severe thunderstorm, which was nearest (20°) at 1^h. 50^m. a. on the 11th passed over from West through South towards East.

Lightning was seen during the night between the 11th and 12th, on the evening of the 20th, during the night between the 21st and the 22nd, between the 22nd and the 23rd, between the 27th and the 28th, and on the 30th.

The total distance traversed by, as well as the duration and average velocity of winds from different quarters were as follows:—

Direction.	Total Distance. Miles.	Duration. Hours.	Velocity. Miles per hour.
N	282	33	8.5
NE	332	30	11.1
E	3276	239	13.7
SE	620	76	8.2
S	2108	179	11.8
SW	1037	67	15.5
W	265	24	11.0
NW	228	28	8.1
Calm	21	44	0.5

TABLE I.

BAROMETRIC PRESSURE FOR THE MONTH OF JUNE, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.
June 1, ...	.29.685	.29.672	.29.662	.29.660	.29.672	.29.688	.29.705	.29.728	.29.731	.29.730	.29.724	.29.716	.29.708	.29.678	.29.672	.29.664	.29.666	.29.675	.29.692	.29.699	.29.713	.29.711	.29.717	.29.713	.29.695
" 2, ...	.692	.677	.681	.673	.682	.695	.709	.711	.725	.736	.757	.748	.715	.702	.678	.663	.663	.666	.680	.690	.696	.702	.715	.706	.698
" 3, ...	.700	.690	.688	.677	.673	.688	.695	.704	.701	.695	.677	.657	.632	.607	.597	.601	.608	.628	.634	.653	.659	.658	.647	.660	
" 4, ...	.624	.605	.587	.574	.574	.588	.621	.626	.650	.637	.639	.622	.616	.613	.596	.600	.599	.605	.605	.603	.603	.634	.656	.642	.613
" 5, ...	.624	.623	.626	.628	.636	.654	.675	.685	.691	.694	.689	.674	.665	.647	.622	.623	.642	.658	.687	.696	.706	.710	.708	.665	
" 6, ...	.712	.702	.694	.694	.703	.716	.730	.736	.750	.750	.756	.752	.746	.722	.710	.698	.710	.726	.737	.743	.751	.766	.778	.774	.732
" 7, ...	.766	.767	.753	.756	.758	.770	.782	.787	.779	.793	.795	.785	.777	.756	.738	.721	.709	.719	.735	.753	.769	.780	.784	.769	.763
" 8, ...	.749	.739	.732	.726	.731	.741	.756	.762	.767	.763	.757	.743	.730	.719	.701	.692	.687	.690	.692	.707	.722	.733	.721	.701	.728
" 9, ...	.688	.683	.677	.665	.664	.673	.694	.683	.683	.682	+ .679	.660	.649	.628	.607	.598	.599	.600	.607	.631	.649	.657	.658	.641	.652
" 10, ...	.632	.618	.608	.602	.608	.621	.639	.644	.643	.636	.616	.609	.594	.575	.554	.542	.537	.549	.570	.585	.581	.598	.594	.587	.598
" 11, ...	.585	.564	.546	.557	.557	.579	.591	.607	.614	.613	.607	.599	.586	.566	.547	.534	.536	.554	.576	.605	.622	.632	.641	.623	.585
" 12, ...	.595	.586	.575	.582	.598	.609	.622	.647	.672	.666	.656	.646	.638	.616	.605	.585	.589	.616	.625	.641	.642	.646	.650	.626	.622
" 13, ...	.607	.584	.571	.567	.569	.581	.596	.592	.610	.606	.601	.587	.569	.544	.522	.506	.515	.521	.536	.551	.560	.572	.567	.588	.565
" 14, ...	.514	.498	.488	.478	.478	.498	.507	+ .523	+ .531	.521	.513	.499	.484	.465	.451	.442	.442	.459	.472	.486	.489	.495	.495	.489	.488
" 15, ...	.474	.467	.459	.466	.467	.483	.497	.496	.503	.501	.488	.482	.459	.447	.434	.427	.426	.433	.455	.476	.498	.532	.537	.539	.477
" 16, ...	.536	.534	.540	.546	.546	.560	.576	.585	.600	.593	.587	.569	.561	.551	.540	.539	.551	.562	.582	.600	.612	.642	.649	.646	.575
" 17, ...	.630	.627	.625	.626	.635	.649	.666	.676	.685	.690	.685	.682	.671	.659	.656	.643	.647	.652	.666	.685	.701	.716	.721	.716	.667
" 18, ...	.713	.707	.710	.713	.721	.726	.735	.752	.759	.758	.762	.756	.743	.740	.732	.715	.720	.721	.732	.740	.755	.783	.785	.780	.740
" 19, ...	.771	.762	.750	.755	.760	.779	.792	.802	.817	.829	.844	.854	.845	.823	.823	.822	.818	.808	.817	.835	.850	.875	.880	.876	.816
" 20, ...	.860	.843	.836	.836	.829	.834	.847	.848	.851	.854	.842	.826	.817	.808	.789	.769	.764	.775	.787	.806	.823	.833	.842	.820	.822
" 21, ...	.802	.788	.776	.772	.775	.787	.785	.793	.797	.801	.793	.777	.761	.749	.728	.711	.695	.708	.715	.735	.750	.754	.742	.740	.760
" 22, ...	.731	.727	.730	.738	.731	.741	.745	.749	.745	.747	.751	.747	.733	.726	.712	.708	.712	.719	.740	.764	.791	.815	.821	.811	.747
" 23, ...	.799	.784	.777	.771	.769	.777	.798	.818	.827	.830	.833	.825	.808	.794	.792	.787	.789	.790	.804	.813	.823	.841	.837	.827	.805
" 24, ...	.800	.781	.780	.777	.784	.794	.813	.815	.807	.794	.790	.777	.767	.756	.742	.736	.735	.737	.746	.758	.767	.771	.764	.760	.773
" 25, ...	.741	.721	.714	.711	.717	.726	.730	.725	.727	.722	.713	.707	.681	.664	.657	.639	.631	.633	.639	.652	.657	.666	.658	.653	.687
" 26, ...	.645	.622	.622	.615	.615	.629	.641	.651	.658	.659	.641	.642	.621	.603	.587	.579	.573	.577	.596	.608	.619	.630	.631	.624	.620
" 27, ...	.613	.612	.622	.632	.640	.667	.679	.688	.696	.705	.706	.684	.668	.658	.651	.639	.646	.655	.681	.709	.722	.740	.737	.730	.674
" 28, ...	.714	.710	.710	.713	.721	.737	.750	.758	.763	.761	.762	.744	.740	.729	.731	.711	.710	.720	.742	.757	.776	.772	.764	.738	
" 29, ...	.738	.721	.714	.711	.700	.709	.722	.725	.739	.732	.727	.722	.712	.691	.682	.662	.650	.650	.670	.679	.689	.693	.678	.698	
" 30, ...	.661	.658	.655	.656	.664	.672	.676	.689	.695	.690	.674	.661	.644	.627	.609	.617	.623	.640	.665	.692	.696	.689	.661	.661	
Hourly Means, j	... 29.680	29.669	29.664	29.662	29.663	29.679	29.692	29.700	29.707	29.707	29.703	29.693	29.680	29.664	29.651	29.639	29.638	29.645	29.659	29.675	29.687	29.702	29.704	29.694	29.677

TABLE II.

TEMPERATURE FOR THE MONTH OF JUNE, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.	Max.	Min.
June 1,.....	77.0	76.8	76.9	76.9	75.2	75.1	75.7	75.5	75.0	75.0	76.0	76.3	78.0	78.0	78.0	75.7	76.1	75.6	75.0	75.1	75.6	75.9	75.9	76.1	76.1	79.3	75.0
" 2,.....	76.6	76.9	77.0	76.9	76.5	75.9	76.1	77.0	80.0	80.0	73.7	75.7	77.8	78.0	78.2	79.9	79.3	78.5	77.8	77.3	77.2	77.2	77.7	78.6	77.5	80.0	73.8
" 3,.....	80.1	79.4	80.0	80.4	80.4	81.2	81.5	82.0	82.2	83.1	83.4	84.0	84.6	84.4	83.7	83.2	82.9	81.6	81.9	81.8	81.9	82.0	81.9	81.9	82.1	85.8	78.6
" 4,.....	82.0	81.7	81.1	81.4	81.9	81.0	79.3	80.2	78.0	78.0	80.0	81.3	76.0	76.0	77.0	76.7	76.5	76.8	77.0	77.0	77.3	77.1	77.1	77.0	78.6	82.4	75.1
" 5,.....	76.9	76.6	76.7	76.7	76.7	76.7	77.7	79.3	79.0	80.0	81.8	82.8	84.1	83.8	82.2	81.7	81.2	81.2	79.9	79.4	79.1	79.2	79.2	79.7	84.3	76.6	
" 6,.....	79.4	79.4	79.1	78.7	79.2	79.4	79.1	79.2	81.0	81.0	80.3	81.0	82.5	83.2	81.4	79.5	79.2	79.1	79.1	79.1	79.1	79.1	79.0	78.9	79.8	83.3	78.7
" 7,.....	78.9	78.7	78.4	78.3	78.3	78.3	78.9	80.1	81.0	80.5	80.7	80.0	80.9	81.0	80.1	79.7	79.3	79.1	79.0	78.9	79.2	79.3	79.0	78.9	79.4	81.2	78.2
" 8,.....	78.6	78.6	78.4	78.4	78.3	78.3	78.1	78.0	78.8	77.5	77.3	77.6	78.4	78.3	79.5	79.2	79.2	79.7	78.2	78.2	78.7	79.0	78.3	78.0	78.4	80.6	77.3
" 9,.....	77.7	77.7	77.5	77.1	77.4	77.8	78.4	81.0	82.9	84.3	84.0	85.1	85.0	84.5	81.8	83.0	82.5	81.0	80.5	80.4	80.1	80.1	79.8	80.7	86.2	77.0	
" 10,.....	79.6	79.8	79.6	79.6	79.7	80.1	82.0	84.0	82.9	84.3	85.1	84.0	85.0	84.6	86.8	83.7	83.3	82.2	82.0	81.2	81.0	81.2	81.1	81.0	82.2	86.8	79.6
" 11,.....	81.1	80.1	80.2	80.0	80.0	81.0	81.9	82.0	83.0	83.7	80.8	80.7	81.0	82.0	81.1	82.0	82.6	81.8	81.5	81.3	81.0	80.5	80.2	81.2	84.7	79.8	
" 12,.....	79.7	79.2	79.0	79.0	77.7	76.6	77.4	77.0	78.7	78.4	79.0	79.6	79.8	79.0	78.0	76.5	75.3	73.5	72.8	72.7	72.0	72.1	71.6	76.7	80.6	71.6	
" 13,.....	71.2	71.2	71.4	71.6	71.9	72.1	72.0	71.0	70.8	71.0	71.2	72.2	73.8	73.4	73.8	73.3	72.8	72.7	72.7	72.2	72.2	72.1	72.0	72.1	74.0	70.7	
" 14,.....	71.9	72.0	72.2	72.2	72.2	73.0	73.4	74.0	74.1	76.4	76.4	78.0	77.2	78.4	79.2	78.2	78.1	76.0	75.3	75.3	75.4	75.4	75.3	75.2	79.3	71.7	
" 15,.....	75.1	74.4	73.8	73.5	73.8	73.2	75.2	77.0	78.2	79.0	79.3	80.0	80.6	80.2	82.0	82.0	82.0	80.7	79.4	77.7	77.7	77.7	76.5	77.8	83.0	73.2	
" 16,.....	76.7	76.0	75.5	75.4	75.2	76.1	77.7	79.2	80.8	83.0	83.8	85.8	86.0	85.5	84.0	83.0	83.1	83.6	81.0	79.2	78.6	78.3	77.8	77.9	80.1	86.0	75.2
" 17,.....	77.3	77.7	77.3	77.1	76.8	77.5	79.0	80.0	80.6	82.0	83.1	84.0	85.0	84.1	82.0	82.9	81.8	80.3	78.9	78.2	78.1	78.5	78.1	77.7	79.9	85.0	76.8
" 18,.....	78.2	77.9	77.6	77.2	77.2	77.6	79.3	80.2	81.2	81.1	80.9	81.0	80.9	80.8	81.2	80.8	79.3	79.0	78.3	78.3	78.2	78.3	78.8	78.6	79.2	81.5	77.0
" 19,.....	78.9	77.5	77.7	78.3	78.2	78.5	78.7	79.8	80.5	80.0	80.0	78.7	78.8	77.8	78.0	75.0	75.0	76.3	75.0	75.1	75.1	75.1	75.1	74.9			
" 20,.....	75.1	75.5	75.6	75.9	76.0	76.8	79.1	80.0	81.1	81.1	80.7	81.0	83.0	82.0	81.0	81.0	80.9	80.6	80.0	78.9	78.5	78.5	78.1	78.1	83.0	74.8	
" 21,.....	78.4	78.6	78.6	78.3	78.6	78.8	80.2	81.2	81.2	82.0	82.1	82.9	83.0	80.5	82.0	82.4	82.1	81.2	80.2	79.5	79.4	79.1	79.0	78.9	80.3	83.0	78.1
" 22,.....	79.0	78.5	78.8	78.3	78.3	78.6	80.2	81.2	82.3	84.0	82.7	84.0	84.2	84.5	85.0	83.5	83.0	82.1	81.3	80.8	80.6	80.4	80.0	80.1	81.3	85.4	78.2
" 23,.....	80.1	80.1	79.7	79.2	79.3	80.0	81.4	82.9	83.9	84.7	84.7	84.9	84.8	84.9	84.0	83.6	82.8	82.0	81.7	81.6	81.3	81.2	80.8	80.6	82.1	85.1	79.2
" 24,.....	80.1	80.1	80.1	80.1	80.3	80.6	81.4	83.1	84.1	85.0	85.0	83.4	84.2	84.5	84.6	83.7	83.2	82.5	82.0	81.6	81.6	81.5	81.3	82.3	85.7	80.1	
" 25,.....	80.8	80.5	80.6	80.2	80.4	81.2	81.4	82.9	80.0	81.7	82.7	83.9	83.9	84.4	84.6	85.0	84.3	83.4	82.5	82.1	82.0	82.1	81.8	81.8	82.3	85.7	79.2
" 26,.....	81.8	81.4	81.6	81.6	81.7	81.9	81.6	82.8	83.5	84.7	85.0	80.3	83.9	84.0	84.2	85.4	84.6	83.8	82.8	82.4	82.0	82.0	81.1	81.2	82.7	85.7	78.8
" 27,.....	81.1	81.1	81.3	81.2	81.5	81.8	82.7	84.0	84.2	84.2	85.3	85.8	87.0	85.4	84.8	85.0	85.0	83.1	82.2	82.0	82.0	81.7	82.1	83.2	87.8	81.1	
" 28,.....	82.0	82.0	80.9	81.3	81.2	80.7	82.2	83.3	84.1	82.0	80.3	82.7	83.0	83.1	78.2	79.6	80.3	80.7	80.1	80.3	81.0	81.4	81.7	81.6	81.4	84.3	78.2
" 29,.....	81.5	81.3	81.3	79.7	80.3	79.5	81.0	82.9	82.2	83.7	83.8	81.7	78.5	80.3	81.9	80.6	81.0	81.8	82.0	82.2	81.6	81.9	81.7	81.8	81.4	84.1	78.3
" 30,.....	81.7	80.9	80.0	80.7	81.2	81.2	82.1	82.5	83.1	84.0	84.0	84.6	85.2	84.2	85.4	84.4	84.0	83.1	82.5	82.5	82.3	82.3	82.3	82.8	85.5	79.8	
Hourly Means,.....	78.6	78.4	78.3	78.2	78.2	78.3	79.1	80.0	80.5	81.1	81.2	81.3	81.8	81.7	81.6	81.0	80.7	80.2	79.5	79.1	79.1	79.0	78.9	78.8	79.8	83.3	76.9

TABLE III.

TEMPERATURE OF EVAPORATION AND RADIATION, FOR THE MONTH OF JUNE, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.	Sun.	Rad.
June 1,.....	74.8	74.8	75.3	75.2	73.9	73.3	74.4	73.7	73.6	74.5	74.9	76.4	75.6	74.6	73.9	73.2	74.0	74.1	74.1	73.9	74.0	74.2	74.3	74.3	115.6	71.3	
" 2,.....	74.7	75.3	75.5	74.3	74.7	74.4	74.7	75.4	77.4	77.6	71.9	72.6	74.9	74.3	75.1	75.7	74.8	75.4	75.5	75.5	75.9	76.2	76.4	76.6	75.2	111.7	71.4
" 3,.....	77.5	77.3	77.0	77.2	77.0	77.2	77.0	77.4	78.1	78.1	78.3	78.4	78.3	78.1	78.6	78.0	77.9	77.8	77.8	77.9	77.7	77.8	77.9	77.8	77.8	148.8	75.6
" 4,.....	77.7	77.5	77.8	77.8	77.5	78.1	76.4	77.6	76.1	76.2	77.5	77.6	75.0	73.7	75.6	75.4	75.8	76.0	76.1	75.6	76.3	76.3	76.1	76.1	76.5	123.6	73.5
" 5,.....	75.7	75.5	75.5	75.6	75.5	75.4	76.0	76.6	76.8	74.7	76.4	77.1	79.6	79.2	77.7	78.1	77.6	77.6	77.7	78.2	78.0	77.6	77.6	77.9	77.0	141.4	75.8
" 6,.....	78.4	78.1	78.1	76.8	77.7	78.3	77.6	77.4	78.2	77.7	77.2	77.9	*78.6	*78.9	*78.0	77.1	76.9	76.7	76.7	76.7	77.1	77.2	77.0	76.8	77.5	149.4	76.6
" 7,.....	77.0	76.4	76.4	76.3	76.1	75.9	76.1	76.6	76.2	76.4	75.8	75.9	76.6	76.0	76.0	76.1	75.8	76.5	76.8	76.8	76.9	76.7	76.8	76.4	143.2	76.5	
" 8,.....	76.7	76.7	76.6	76.6	76.5	76.7	77.2	77.1	76.6	76.2	76.4	76.6	76.8	77.1	77.2	76.9	76.9	76.6	76.8	77.0	76.9	76.6	76.4	76.7	144.6	76.3	
" 9,.....	76.1	76.3	76.1	76.0	76.4	76.5	77.1	77.1	77.6	76.9	78.0	78.8	79.1	77.9	77.6	77.4	77.5	77.4	78.0	77.5	77.6	77.3	77.2	77.3	146.8	75.7	
" 10,.....	77.0	78.1	77.5	77.3	77.4	77.4	78.6	78.6	79.6	79.6	79.7	79.4	78.5	79.8	79.6	79.8	79.3	79.5	78.7	79.1	78.8	78.8	78.7	79.0	78.8	149.3	76.7
" 11,.....	79.2	78.2	78.2	77.6	77.6	77.8	78.1	78.6	78.6	79.0	79.1	77.6	77.6	77.8	77.6	76.0	76.5	76.7	75.7	75.4	74.1	73.6	72.2	72.1	76.9	129.7	77.7
" 12,.....	71.9	71.6	71.2	71.8	74.0	73.1	73.2	73.4	73.9	72.5	72.6	73.3	73.6	73.1	72.3	72.1	72.0	72.1	72.1	71.9	71.6	70.7	70.4	70.3	72.3	131.9	70.3
" 13,.....	69.9	69.8	70.2	70.4	70.3	68.9	69.3	69.2	69.0	69.6	69.6	70.2	71.0	71.4	70.8	70.9	71.5	71.6	71.6	71.6	71.5	71.5	71.1	71.1	70.5	106.4	68.5
" 14,.....	70.7	70.7	70.4	70.8	70.9	70.5	70.8	71.0	70.9	71.4	71.6	73.4	72.3	72.9	73.7	73.2	73.3	73.9	72.6	69.7	69.7	70.6	70.3	71.6	117.3	70.2	
" 15,.....	69.6	69.4	69.0	68.6	68.8	69.0	70.4	70.1	71.6	72.1	71.9	72.1	72.9	73.3	74.7	74.4	74.8	73.9	72.4	72.9	72.7	72.5	73.3	72.9	71.8	144.8	70.0
" 16,.....	72.7	73.2	73.5	73.2	72.7	73.0	74.6	74.3	75.0	73.1	72.3	69.8	71.5	73.6	72.4	72.0	72.7	71.4	72.7	73.1	72.9	71.7	72.0	73.0	72.8	142.1	70.3
" 17,.....	72.4	72.8	73.0	72.5	72.6	72.8	75.0	75.0	75.1	75.6	76.7	76.7	78.4	76.7	75.0	74.2	74.9	74.6	74.6	74.5	74.4	74.7	74.3	74.8	74.6	144.3	70.3
" 18,.....	74.6	74.2	73.9	73.7	74.0	74.6	75.0	74.9	75.2	75.1	75.1	74.8	75.3	74.8	74.6	75.3	74.1	74.9	74.9	74.6	75.3	74.5	75.4	75.3	74.8	143.6	72.4
" 19,.....	74.6	75.0	75.0	75.0	75.3	75.6	75.9	76.7	76.8	76.6	75.4	74.6	74.2	74.8	75.1	72.4	72.9	73.6	72.8	73.2	73.4	73.5	73.4	73.4	74.5	119.0	72.1
" 20,.....	73.6	73.8	74.0	74.0	74.1	74.5	76.2	77.1	77.5	77.1	76.9	77.9	78.3	77.2	77.4	77.6	77.6	77.6	76.7	76.2	76.7	76.7	76.4	76.3	141.1	71.5	
" 21,.....	76.8	75.5	76.9	76.5	76.7	77.2	77.8	78.1	78.1	77.6	77.3	77.6	77.5	76.9	77.7	77.5	76.7	76.7	76.5	76.6	76.5	76.3	76.4	77.0	148.5	75.4	
" 22,.....	76.6	76.7	76.7	76.4	76.4	76.6	77.1	77.6	78.1	78.3	78.7	76.6	77.3	77.2	77.5	77.3	77.3	77.8	77.6	76.9	77.3	77.2	77.4	76.9	77.2	140.0	75.4
" 23,.....	76.3	76.8	76.6	76.7	76.7	76.6	77.1	77.0	77.9	78.0	78.3	78.0	77.8	78.5	77.6	77.8	77.2	77.7	77.7	77.7	77.4	77.7	77.0	77.4	148.5	76.2	
" 24,.....	76.7	76.6	76.6	77.0	76.6	76.2	77.1	77.3	78.1	78.6	77.6	77.7	78.1	78.1	77.5	76.9	76.8	76.7	76.5	76.9	77.1	77.1	77.1	148.3	77.1		
" 25,.....	76.7	76.8	77.1	76.9	76.7	76.9	77.4	76.6	76.7	77.3	76.7	77.6	78.0	77.3	77.4	76.3	77.4	76.3	75.9	76.6	76.4	76.6	76.7	76.9	141.6	75.4	
" 26,.....	76.6	76.2	76.7	76.7	76.6	76.9	76.8	77.5	76.6	77.5	77.1	77.5	77.7	77.0	76.8	77.5	76.8	76.6	77.3	77.2	76.8	76.9	76.8	76.9	149.9	77.1	
" 27,.....	76.8	76.7	76.6	75.9	76.2	75.9	76.6	77.5	77.6	78.1	78.7	78.6	78.3	78.0	77.8	77.8	77.6	77.5	77.6	77.8	77.6	77.5	77.7	77.5	147.8	76.6	
" 28,.....	77.6	77.4	77.0	76.9	77.0	77.0	78.1	78.2	78.5	77.6	77.5	77.2	77.2	78.4	75.5	76.4	76.9	76.9	77.6	77.0	77.3	77.3	77.5	77.3	153.8	75.5	
" 29,.....	76.8	76.5	76.8	76.8	76.8	76.8	77.0	77.3	77.4	76.9	78.4	78.3	77.0	75.2	76.2	77.5	75.9	77.5	77.5	77.4	78.0	77.9	77.8	77.2	142.9	75.6	
" 30,.....	77.6	76.2	76.1	76.2	76.7	77.2	77.6	77.3	77.4	78.3	77.1	78.9	79.8	78.8	79.8	79.0	78.1	78.1	78.0	77.8	78.4	78.3	78.0	78.1	77.9	143.2	75.4

Hourly Means,	75.5	75.4	75.4	75.2	75.3	75.4	75.9	76.1	76.3	76.3	76.2	76.2	76.5	76.4	76.3	76.0	76.0	75.9	75.9	75.8	75.7	75.6	75.7	75.9	138.6	74.1	

* Interpolated.

TABLE IV.

TABLE IV.
ON HOURLY AND DAILY RELATIVE HUMIDITY AND TENSION OF AQUEOUS VAPOUR
FOR THE MONTH OF JUNE, 1886.

UR.	HOURLY MEAN.		DATE.	DAILY MEAN.	
	Humidity.	Tension.		Humidity.	Tension.
			1886.		
a	86	0.844	June 1,.....	92	0.825
"	86	0.843	" 2,.....	90	0.845
"	86	0.844	" 3,.....	82	0.896
"	86	0.837	" 4,.....	91	0.886
"	86	0.841	" 5,.....	88	0.893
"	86	0.844	" 6,.....	90	0.913
"	86	0.854	" 7,.....	87	0.870
"	82	0.851	" 8,.....	92	0.897
"	81	0.853	" 9,.....	85	0.893
"	79	0.845	" 10,.....	85	0.940
"	78	0.839	" 11,.....	82	0.868
on.	78	0.838	" 12,.....	79	0.735
P	77	0.845	" 13,.....	93	0.726
"	77	0.842	" 14,.....	84	0.727
"	77	0.839	" 15,.....	74	0.701
"	78	0.833	" 16,.....	69	0.709
"	79	0.837	" 17,.....	77	0.787
"	81	0.840	" 18,	80	0.805
"	85	0.850	" 19,	86	0.817
"	86	0.854	" 20,.....	88	0.870
"	86	0.850	" 21,.....	86	0.885
"	86	0.847	" 22,.....	83	0.880
"	86	0.844	" 23,.....	80	0.878
"	87	0.850	" 24,.....	78	0.862
			" 25,.....	77	0.854
			" 26,.....	76	0.848
			" 27,.....	76	0.868
			" 28,.....	83	0.883
			" 29,.....	82	0.878
			" 30,.....	79	0.891
		
mean,	83	0.844	Mean,.....	83	0.844

TABLE V.
DURATION OF SUNSHINE.

TABLE VI.
RAINFALL FOR THE MONTH OF JUNE, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Sums.	
June 1,	0·050	...	0·010	0·325	0·450	0·285	0·140	0·370	0·105	0·055	0·055	0·020	...	...	0·015	0·275	0·045	0·055	0·065	0·005	...	...	...	...	2·325
" 2, .....	...	...	...	0·050	0·110	0·165	0·050	0·050	0·025	0·125	0·120	0·010	...	...	...	...	...	...	...	0·010	...	0·010	...	...	0·735
" 3,	0·090	0·050	0·090	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	0·015	...	...	...	...	...	...	0·250
" 4, .....	...	0·030	0·015	...	0·030	0·230	0·135	0·270	0·625	0·130	...	...	0·630	0·200	0·095	0·075	0·110	0·010	0·005	...	...	...	...	...	2·595
" 5, .....	...	...	...	0·030	0·015	...	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·050
" 6, .....	...	0·025	...	...	0·005	0·010	...	0·010	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·050
" 7,
" 8, .....	...	...	...	...	...	...	0·115	0·015	0·190	0·190	0·175	0·005	...	...	...	...	...	...	...	...	...	...	...	...	0·690
" 9, .....	...	...	...	...	...	...	0·010	...	...	...	...	...	...	...	...	...	...	...	...	0·005	...	...	...	...	0·015
" 10, .....	...	...	...	...	...	...	...	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·005
" 11, .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" 12, .....	...	...	...	...	0·005	0·005	0·005	...	...	...	...	...	...	...	...	...	...	0·020	0·170	0·080	0·070	0·025	0·025	0·025	0·355
" 13,	0·110	0·015	0·010	0·025	0·035	0·050	0·015	...	0·620	0·005	0·035	0·070	0·040	...	0·050	0·010	0·015	0·045	0·025	0·075	0·090	0·015	0·020	0·015	0·790	
" 14,	0·005	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	0·005	0·010	...	...	...	...	...	...	...	0·025
" 15, .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" 16, .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" 17, .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" 18, .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" 19, .....	...	0·180	...	...	...	...	...	...	...	0·010	0·005	0·085	0·155	0·185	0·015	...	...	...	...	...	...	...	...	...	0·635
" 20, .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" 21, .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" 22, .....	...	...	...	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·005
" 23, .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" 24, .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" 25, .....	...	...	0·010	...	...	0·010	0·245	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·265
" 26, .....	...	...	0·005	...	...	0·010	...	...	0·095	...	...	...	...	...	...	...	...	0·090	...	...	0·035	...	...	...	0·145
" 27,	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·005	0·005	...	...	...	...	...	...	0·095
" 28,	0·010	0·175	...	...	0·125	...	...	0·035	...	0·020	0·420	0·010	...	0·340	...	0·005	0·005	...	...	...	...	...	...	...	0·715
" 29, .....	...	...	0·020	0·070	0·070	...	0·035	...	0·020	0·420	0·010	...	0·020	...	...	...	0·120	...	...	...	...	...	...	...	0·785
" 30, .....	...	0·020	...	...	0·030	...	...	...	...	0·015	0·010	...	...	...	...	0·020	...	...	...	...	...	...	...	0·095	
.....	
Sums,.....	0·270	0·480	0·165	0·520	0·850	0·745	0·400	0·870	1·040	0·560	0·420	0·800	0·705	0·295	0·675	0·545	0·195	0·230	0·115	0·390	0·135	0·125	0·055	0·040	10·625	

TABLE VII.

DIRECTION AND VELOCITY OF THE WIND FOR THE MONTH OF JUNE, 1886.

TABLE VIII.

MEAN HOURLY COMPONENTS AND MEAN DIRECTION OF THE WIND, FOR JUNE, 1886.

Hour.	Components (miles per hour).						Direction.
	N	E	S	W	+ N-S	+ E-W	
1 a.	1.1	5.9	4.5	0.5	-3.4	+ 5.4	E 32° S
2 "	0.9	5.0	5.2	0.5	4.3	4.5	E 44° S
3 "	1.1	4.3	5.2	0.5	4.1	3.8	E 47° S
4 "	0.6	4.2	4.4	0.7	3.8	3.5	E 47° S
5 "	0.3	4.9	4.5	1.0	4.2	3.9	E 47° S
6 "	1.0	4.8	4.1	1.8	3.1	3.0	E 46° S
7 "	1.0	4.8	4.4	1.5	3.4	3.2	E 47° S
8 "	0.9	5.6	4.5	1.9	3.7	3.6	E 46° S
9 "	0.9	5.5	4.2	2.3	3.3	3.2	E 46° S
10 "	0.9	5.7	4.8	2.0	3.9	3.8	E 46° S
11 "	2.2	6.0	4.2	3.0	2.0	3.0	E 34° S
Noon.	1.2	6.0	4.7	3.6	3.4	2.5	E 54° S
1 p.	1.3	6.0	4.8	3.3	3.5	2.7	E 52° S
2 "	0.8	6.6	5.4	3.2	4.6	3.4	E 54° S
3 "	0.7	6.2	5.8	2.3	5.1	3.9	E 53° S
4 "	0.9	5.6	5.0	2.6	4.1	3.0	E 54° S
5 "	0.4	5.5	4.2	2.1	3.8	3.3	E 49° S
6 "	1.0	4.9	4.1	1.4	3.1	3.5	E 42° S
7 "	0.9	5.2	4.1	1.0	3.2	4.2	E 37° S
8 "	0.7	5.6	3.9	0.6	3.1	5.0	E 32° S
9 "	0.9	6.0	4.0	0.7	3.1	5.3	E 30° S
10 "	0.9	6.5	4.1	0.8	3.2	5.7	E 29° S
11 "	1.0	5.2	4.4	0.5	3.3	4.7	E 35° S
Midt.	0.9	5.8	4.7	0.7	-3.8	+ 4.6	E 40° S
Mean,.....	0.9	5.5	4.5	1.6	-3.6	+ 3.9	E 44° S

TABLE IX.

DIRECTION AND FORCE OF THE WIND AT VICTORIA PEAK, AND SEA DISTURBANCE.

DATE.	4 a.			10 a.			4 p.			10 p.		
	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.	Sea.
1886.												
June 1,.....	0	SSW	5	0	S	5	0	S	4	0
" 2,.....	0	SW	5	0	SSW	4	0	SW	4	0
" 3,.....	3	S	5	3	S	6	3	S	6	3
" 4,.....	2	SW	6	2	SW	5	0	SW	5	0
" 5,.....	0	SSW	4	0	SSW	4	0	SSW	4	1
" 6,.....	3	S	4	3	ESE	5	3	ESE	4	3
" 7,.....	3	E	5	3	E	4	3	E	4	2
" 8,.....	3	ESE	4	2	SSE	3	1	SSE	4	1
" 9,.....	1	S	2	0	SSW	3	1	SW	3	0
" 10,.....	0	/S	3	0	SW	3	2	SW	4	0
" 11,.....	2	S	3	0	N	5	2	NE	6	3
" 12,.....	...	5	4	E	6	5	E	6	6	E	6	5
" 13,.....	4	E	5	4	E	4	4	E	4	3
" 14,.....	3	ENE	4	3	N	5	3	N	5	3
" 15,.....	0	N	5	2	NW	5	1	NW	4	0
" 16,.....	0	NNW	4	1	N	5	0	N	4	0
" 17,.....	0	N	2	1	SE	4	1	SE	4	0
" 18,.....	0	ESE	4	2	E	6	3	SSW	6	2
" 19,.....	2	SE	5	2	SE	5	3	SE	4	0
" 20,.....	1	SSW	4	1	ESE	4	0	SSW	4	0
" 21,.....	0	SSW	4	0	SSW	5	0	SSW	5	0
" 22,.....	0	SSW	4	2	SSW	5	1	SSW	5	1
" 23,.....	1	S	5	2	SW	6	2	SW	6	2
" 24,.....	2	S	5	2	SW	6	2	S	6	2
" 25,.....	3	S	7	3	SW	6	3	SW	6	3
" 26,.....	3	SW	6	3	S	5	2	S	6	2
" 27,.....	3	S	6	2	S	6	0	S	6	0
" 28,.....	3	S	6	3	SW	7	3	SW	6	3
" 29,.....	2	SW	6	3	S	6	1	S	6	1
" 30,.....	3	S	6	3	SW	7	3	SW	6	3
.....
Mean,.....	1.7	E 86° S	4.7	1.9	E 89° S	4.9	1.8	S 1° W	4.9	1.8

TABLE X.
VICTORIA PEAK.

E.	BAROMETER.			TEMPERATURE.							
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	Sun.	Max.	Min.	Rad.	
5.	ins.	ins.	ins.	°	°	°	°	°	°	°	°
6.	28.022	27.974	28.008	71.0	70.6	70.4	108.0	74.4	69.3	66.4	66.4
7.	.023	.990	27.986	73.6	72.9	71.4	104.0	74.8	68.9	65.1	65.1
8.	27.996	.914	.935	74.6	75.6	74.4	113.0	77.2	71.4	68.6	68.6
9.	.939	.907	.941	73.5	73.4	73.4	115.2	76.4	69.0	69.2	69.2
10.	28.011	.963	28.012	73.4	75.6	73.6	148.2	76.4	71.8	69.3	69.3
11.	.046	28.021	.053	74.6	73.5	73.3	146.2	75.4	69.9	70.2	70.2
12.	.087	.044	.064	73.3	76.5	72.3	130.2	77.5	71.9	71.1	71.1
13.	.059	.021	.030	73.4	74.5	73.3	113.4	76.0	71.2	71.3	71.3
14.	.006	27.944	27.939	74.4	74.6	74.4	148.1	78.0	73.3	72.2	72.2
15.	27.954	.888	.909	75.2	77.5	74.4	128.0	79.2	72.9	71.3	71.3
16.	.931	.881	.900	75.8	74.5	73.5	119.0	77.5	71.9	69.3	69.3
17.	.946	.895	.896	70.6	71.3	66.6	121.2	74.2	66.0	63.8	63.8
18.	.887	.804	.781	66.8	68.0	64.8	93.6	69.4	64.8	65.0	65.0
19.	.824	.770	.775	67.8	69.5	67.2	115.2	74.2	64.8	63.6	63.6
20.	.806	.764	.856	70.6	74.3	71.2	136.2	76.0	66.0	65.0	65.0
21.	.911	.880	.957	74.5	76.5	73.4	137.8	77.4	65.8	66.6	66.6
22.	.986	.975	28.003	75.5	74.2	72.6	144.0	76.8	69.2	68.2	68.2
23.	28.056	28.022	.069	74.6	74.4	72.0	139.2	76.0	71.0	70.3	70.3
24.	.112	.075	.143	72.8	71.0	70.8	108.2	74.2	68.9	67.4	67.4
25.	.146	.096	.110	74.0	75.4	72.5	137.0	77.0	69.0	68.2	68.2
26.	.107	.046	.055	75.4	75.6	73.4	146.0	77.4	72.5	70.6	70.6
27.	.068	.044	.083	75.0	74.4	73.2	137.1	77.0	72.8	71.4	71.4
28.	.133	.107	.145	74.5	74.5	74.4	144.0	77.4	73.2	72.3	72.3
29.	.121	.066	.080	74.8	75.4	74.0	141.2	76.8	73.0	70.6	70.6
30.	.027	27.965	27.973	73.4	75.5	74.3	138.2	76.4	72.0	71.3	71.3
31.	27.959	.907	.944	74.6	75.2	74.3	140.0	76.5	71.8	70.8	70.8
32.	28.019	.980	28.036	74.5	75.6	74.5	137.4	77.2	72.9	71.6	71.6
33.	.071	28.028	.067	75.5	71.6	73.6	142.0	76.0	71.6	71.0	71.0
34.	.045	.000	.005	74.4	73.5	73.6	131.6	76.2	72.0	70.4	70.4
35.	.002	27.934	27.995	74.4	75.5	75.4	138.0	76.2	72.8	74.2	74.2
36.	...	...	...	...	...	...	...	...	...	...	...
37.	28.010	27.964	27.992	73.6	74.0	72.5	130.0	76.2	70.4	69.2	69.2

TABLE XI.
HUMIDITY AT THE OBSERVATORY AND AT VICTORIA PEAK.

TE.	RELATIVE HUMIDITY.						TENSION OF AQUEOUS VAPOUR.					
	OBSERVATORY.			VICTORIA PEAK.			OBSERVATORY.			VICTORIA PEAK.		
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.
1.	93	92	91	93	97	91	0.811	0.814	0.815	0.707	0.728	0.678
2.	89	81	95	99	97	85	.915	.834	.892	.822	.763	.662
3.	79	78	82	100	99	98	.896	.890	.897	.854	.879	.836
4.	92	94	96	95	98	98	.881	.864	.897	.791	.800	.800
5.	77	85	93	93	91	94	.789	.915	.928	.768	.801	.782
6.	86	89	91	100	100	87	.907	.900	.910	.854	.823	.716
7.	81	84	89	98	93	97	.847	.849	.893	.806	.851	.767
8.	94	91	91	100	91	94	.888	.908	.898	.824	.778	.770
9.	75	81	89	96	99	94	.845	.882	.914	.820	.850	.804
10.	80	83	89	96	89	100	.949	.966	.955	.842	.838	.848
11.	83	78	69	98	95	95	.938	.830	.730	.868	.814	.787
12.	73	74	94	89	87	90	.716	.710	.736	.668	.667	.586
13.	94	86	97	95	94	96	.709	.720	.764	.624	.644	.587
14.	77	78	74	97	97	86	.703	.752	.650	.660	.704	.575
15.	70	69	76	91	81	88	.696	.750	.730	.683	.696	.668
16.	60	57	72	87	70	75	.682	.638	.690	.747	.638	.611
17.	73	64	83	82	79	89	.801	.729	.809	.727	.675	.717
18.	74	76	83	87	85	94	.792	.804	.804	.746	.725	.740
19.	85	88	90	94	95	89	.872	.762	.800	.757	.722	.673
20.	83	85	92	93	90	95	.878	.902	.896	.785	.791	.765
21.	81	79	89	93	86	95	.888	.879	.879	.815	.765	.785
22.	76	74	86	93	90	97	.893	.855	.892	.808	.768	.791
23.	73	76	85	95	99	95	.870	.876	.904	.819	.847	.816
24.	74	72	79	94	91	98	.893	.834	.850	.814	.803	.821
25.	81	65	77	96	87	95	.879	.790	.843	.793	.774	.813
26.	71	68	79	95	92	95	.848	.838	.857	.813	.802	.813
27.	75	71	81	95	94	100	.881	.857	.883	.819	.837	.851
28.	81	86	83	95	95	98	.888	.868	.883	.838	.738	.814
29.	78	79	83	96	95	95	.902	.832	.907	.820	.783	.790
30.	76	77	83	100	99	100	.893	.919	.916	.853	.872	.882
31.	...	...	...	...	...	...	...	...	...	...	...	...
32.	79	79	85	94	92	93	0.845	0.832	0.847	0.785	0.773	0.752

TABLE XII.

AMOUNT AND CLASSIFICATION OF CLOUDS AND DIRECTION WHENCE COMING.

DATE.	1 a.			4 a.			7 a.			10 a.		
	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	D
1886.												
June 1,	10	cum-nim.	SW	10	nim.	S	10	nim.	SW	10	nim.	
" 2,	5	cum.	SSW	10	nim.	SSW	10	nim.	SSW	10	nim.	
" 3,	9	nim.	...	10	nim.	...	10	cum-nim.	SSW	10	sun-cum. cum-nim.	
" 4,	9	cum-nim.	SSW	10	nim.	SSW	10	nim.	SSW	10	nim.	
" 5,	3	cum-nim.	...	10	nim.	SSW	10	nim.	SSW	9	sm-cum. cum.	
" 6,	8	nim.	ESE	10	cum-nim.	ESE	10	cum-nim.	ESE	7	e-str. sun-cum. R-cum.	
" 7,	5	nim.	SE	7	nim.	SE	8	R-cum.	ESE	6	e-str. R-cum.	
" 8,	7	nim.	ESE	7	cum-nim.	ESE	10	cum-nim.	ESE	10	nim.	
" 9,	3	cum-nim.	SSE	5	cum.	S	10	cum-nim.	SSW	7	e-cum. cum.	
" 10,	1	cum.	...	6	cum-nim.	...	8	cum.	SE	8	sun-cum. cum.	
" 11,	10	e-str. cum-str.	S	9	cum-str.	S	10	cum-str.	SE	10	e-str. cum-str.	
" 12,	10	sun-cum. cum-str.	ENE	10	nim.	E	10	cum-nim.	ENE	10	sun-cum. cum.	
" 13,	10	nim.	ENE	10	nim.	ENE	10	nim.	ENE	10	nim.	
" 14,	10	nim.	E	10	nim.	E	10	cum-nim.	ENE	10	R-cum.	
" 15,	9	sm-cum.	N	5	cum.	N	4	e-str. cum.	N	3	e-str. cum.	
" 16,	1	sm-cum.	N	1	cum.	N	1	cum.	N	1	cum.	
" 17,	2	e-cum.	S	1	cum.	S	1	cum.	...	2	cum.	
" 18,	3	e-cum. cum-str.	E SE	6	e-cum. cum.	E NE	5	cum.	NE	4	e-cum.	
" 19,	9	cum-str.	SE	10	nim.	SSE	10	nim.	S	10	str. cum-nim.	
" 20,	9	e-str. e-cum.	W	10	R-cum.	W	8	e-str. cum.	SW	5	e-str. cum.	
" 21,	9	sun-cum. cum-str.	SW SE	7	sun-cum.	S	7	e-cum. cum.	S	8	e-cum. cum.	
" 22,	10	e-str. cum.	W SSW	9	cum.	SW	10	cum.	SSW	10	e-cum. cum.	
" 23,	5	e-str. cum.	SSE	7	cum.	S	9	cum.	S	7	e-cum. cum.	
" 24,	9	e-str. cum-str.	S	9	cum.	SSE	7	cum.	S	4	e-cum. cum.	
" 25,	7	cum.	SSW	9	nim.	SSW	10	cum-nim.	SW	9	e-cum. cum.	
" 26,	7	cum.	SSW	9	nim.	SSW	8	cum.	SSW	7	e-cum. cum.	
" 27,	4	cum-nim.	SSE	8	nim.	S	7	cum.	SSW	5	e-cum. cum.	
" 28,	10	cum-nim.	SSE	9	nim.	S	10	cum.	SSW	10	e-cum. cum.	
" 29,	7	cum-nim.	SW	4	nim.	SW	10	cum-nim.	SW	9	cum-nim. e-cum.	
" 30,	4	cum.	SSW	7	nim.	SW	9	cum.	SW	5	cum-nim. e-cum.	
.....	
Mean,.....	6.8	...	...	7.8	...	...	8.4	...	...	7.5	...	

TABLE XII,—Continued.

AMOUNT AND CLASSIFICATION OF CLOUDS AND DIRECTION WHENCE COMING.

1 p.			4 p.			7 p.			10 p.			Daily and Monthly Means.
Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	
10	nim.	SSW	10	nim.	SW	10	nim.	SW	10	cum-nim.	...	10.0
10	nim.	SSW	10	str. cum-nim.	SSW	10	str. cum-nim.	SW	2	cum-nim.	S	8.4
10	sm-cum. cum-nim.	SSW	10	str-cum. cum-nim.	SW	10	str. cum-nim.	SW	10	cum-nim.	SW	9.9
10	nim.	SSW	10	nim.	WSW	10	str. cum-nim.	WSW	10	cum-nim.	...	9.9
8	sm-cum. cum.	SW	7	... sm-cum. cum.	WSW	2	... e-cum.	...	2	cum.	...	6.4
9	e-cum. cum.	SE	10	... cum-nim.	E	3	... e-cum.	ESE	6	cum.	ESE	7.9
5	e-cum. cum.	E	6	e-cum.	E	9	cum.	ESE	6	cum.	SE	6.5
10	nim.	SE	10	cum-nim.	WSW	5	e-cum. cum.	SE	2	cum.	SSE	7.6
8	e str. cum.	E	8	sm-cum.	WSW	5	...	NE	10	e-str. cum-nim.	SSE	7.0
9	e-str. cum. cum.	NE	9	R-cum. e-str.	SSW	8	cum. e-str.	...	7	e-str. cum.	W	7.0
10	str.	E	10	R-cum. s.r.	NE	9	sm-cum. cum.	NW	10	sm-cum. cum.	ENE	9.7
10	nim. cum.	WSW	10	str. cum-nim.	ENE	10	nim.	ENE	10	nim.	E	10.0
10	nim.	ENE	10	nim.	ENE	10	nim.	E	10	nim.	E	10.0
10	R-cum. cum-nim.	ENE	10	cum-nim.	NNNE	10	cum-nim.	NNNE	10	cum.	N	10.0
9	e-str. cum.	SSW	1	e-str. cum.	N	0	...	...	0	...	...	3.9
0	...	...	3	cum.	N	5	e-str. sm-cum.	ENE	7	sm-cum.	NE	2.4
6	cum.	S	7	cum.	NNE	1	cum.	...	3	sm-cum.	ENE	2.9
3	cum.	NE	6	e-str. cum.	S	8	...	E	10	cum-nim.	SSE	5.6
10	nim.	SSE	10	nim.	S	10	...	...	3	...	W	9.0
6	e cum.	W	8	e-cum. cum.	NW	6	...	...	6	...	WNW	7.3
6	e-cum. cum.	SSW	5	...	SE	...	...	SSW	2	e-str.	...	6.7
6	...	SSE	5	e-cum. cum.	W	10	...	...	3	e-str. cum.	S	8.4
9	sm-cum.	W	7	...	SSE	9	...	...	3	...	...	8.1
7	...	SW	10	...	N	9	...	...	5	cum.	SSW	7.8
7	e-str. cum.	KNE	10	e-str. cum.	SW	10	...	...	6	cum-nim.	SW	8.4
7	...	SSW	10	...	SSW	10	...	...	6	cum-nim.	S	8.4
7	e-str. cum.	ENE	10	e-str. cum.	NNE	10	...	...	5	cum.	S	8.4
10	e-str. cum.	S	9	e-cum. cum.	SSW	8	...	...	3	cum.	SSW	7.2
6	...	NE	8	e-cum. cum.	NE	8	...	...	2	cum.	SSW	6.4
7	...	SSW	9	...	SSW	6	...	...	5	cum-nim.	S	9.0
10	...	SSW	10	...	SSW	8	...	...	7	cum-nim.	SW	8.4
10	...	SE	10	...	SSE	7.5	...	...	7	cum-nim.	SW	6.4
7	cum. cum.	ENE	6	e-cum. cum.	NE	6	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	7.6
8.2	...	...	8.3	...	...	7.5	...	...	6.1	...	...

TABLE XIII.
RAINFALL AT DIFFERENT STATIONS.

DATE.	OBSERVATORY.		STONE CUTTERS' ISLAND.		VICTORIA PE.
	Amount.	Duration.	Amount.	Amount.	
1886.	ins.	hrs.	ins.	ins.	
June 1,.....	1.010	15	2.12	5.12	
" 2,	0.495	7	0.50	0.56	
" 3,.....	1.480	8	1.67	1.72	
" 4,.....	1.180	9	1.09	2.35	
" 5,.....	0.050	3	...	0.18	
" 6,.....	...	1	...	...
" 7,.....	0.320	4	0.13	0.46	
" 8,.....	0.380	3	0.56	0.35	
" 9,.....	0.010	1	...	...
" 10,.....	...	...	...	...
" 11,.....	0.015	5	...	0.18	
" 12,.....	0.620	15	0.46	0.78	
" 13,.....	0.520	16	0.47	1.23	
" 14,.....	0.015	2	...	* 0.02	
" 15,.....	...	...	...	...
" 16,.....	...	...	...	...
" 17,.....	...	...	0.55	...	
" 18,.....	0.180	5	0.22	* 0.20	
" 19,.....	0.455	6	0.32	† 1.00	
" 20,.....	...	...	...	...
" 21,.....	0.005	...	0.04	...	
" 22,.....	...	...	...	...
" 23,.....	...	1	...	...
" 24,.....	0.265	2	0.16	0.46	
" 25,.....	0.015	1	0.05	...	
" 26,.....	0.135	2	0.06	0.26	
" 27,.....	0.455	3	0.54	0.15	
" 28,.....	0.545	4	0.80	1.74	
" 29,.....	0.640	5	0.28	0.58	
" 30,.....	0.085	4	...	...
.....	
Total,.....	8.875	122	10.02	17.34	

* Interpolated.

† Approximate.

W. DOBERCK,
Government Astronomer

Hongkong Observatory, 14th July, 1886.

HONG KONG OBSERVATORY.

Weather Report for July, 1886.

the *China Coast Meteorological Register*, based on information transmitted by the Great Northern Eastern Extension Telegraph Companies, which was daily published, is given a summary of the meteoric circumstances in Luzon and along the Coast of China, and information concerning the weather in Nagasaki and Vladivostock.

Unusual visibility was noticed on the 22nd.

It was hazy on the mornings of the 25th and the 31st.

Snow fell on the evenings of the 3rd and the 9th.

Moonar coronas were seen on the 6th, the 18th and the 21st.

Moonar halos were seen on the 8th, the 9th, the 19th and the 22nd.

Polar coronas were seen on the 26th and the 31st.

Polar halos were seen on the 10th, the 11th, the 14th, the 22nd, the 26th, the 27th, the 28th and the 30th.

Rainbows were seen on the afternoons of the 12th, the 14th and the 26th.

Thunder and lightning occurred on the 1st and the 2nd, faint lightning on the 3rd, lightning on the 5th and thunder and lightning on the 6th.

Between 2 a. and 3 a. on the 7th a thunderstorm passed from SW towards NW. It was nearest at 2^h 10^m a. Thunder was heard again in the afternoon.

Thunder occurred on the morning of the 11th, and lightning on the morning of the 12th and during the night between the 13th and the 14th.

In the evening of the 14th a thunderstorm passed from W round by S to E. It was nearest at 9^h 32^m p. The following night was squally and thunder and lightning were observed at 10^h 15^m p. A thunderstorm passed from SW round by N towards NE. It was nearest at 7^h 45^m a. and at 9^h 15^m a. (10^s) on the 15th. Between 2 p. and 5 p. on the same day a succession of thunderstorms, accompanied by fearfully heavy rain, passed over from W to E. They were nearest at 2^h 30^m p. (3^s), at 3^h 31^m p. (2^s) and at 3^h 47^m p. (2^s).

At the last mentioned time the flash came down like a ball of fire and struck the top of the Five's (at the North Barracks in the City of Victoria 1½ miles SW by S of the Observatory) scattering of brick and mortar for about fifty yards around. It split the wall for a small distance down, but on the whole not much damage was done. Then it ran down the wall over the top of a zinc which was not damaged although an iron bar underneath it was bent considerably, and finally ended itself along the barrack square, which is gravelled, but this was not damaged. Immediately after the rain almost ceased for nearly a quarter of an hour.

Thunder and lightning were observed till 9 a. on the 16th.

Lightning occurred on the evenings of the 22nd and the 24th, and thunder and lightning on the evening of the 25th.

At 12^h 45^m a. on the 25th a thunderstorm was nearest (3^s). It passed Eastwards of the Observatory.

Lightning occurred during the night between the 26th and the 27th and during the five following days.

The total distance traversed by, as well as the duration and average velocity of winds from different quarters were as follows:—

<i>Direction.</i>	<i>Total Distance.</i>	<i>Duration.</i>	<i>Velocity.</i>
	Miles.	Hours.	Miles per hour.
N	75	14	5.4
NE	269	31	8.7
E	3556	253	14.1
SE	1212	90	13.5
S	1528	147	10.4
SW	1310	112	11.7
W	287	39	7.4
NW	188	31	6.1
Calm	10	27	0.4

TABLE I.
BAROMETRIC PRESSURE FOR THE MONTH OF JULY, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.
July 1, ...	29.683	29.676	29.667	29.662	29.666	29.671	29.682	29.681	29.693	29.703	29.692	29.688	29.672	29.659	29.653	29.634	29.648	29.665	29.688	29.710	29.722	29.732	29.727	29.722	29.683
" 2, ...	.711	.697	.691	.688	.683	.683	.690	.709	.728	.731	.731	.712	.701	.683	.669	.659	.678	.680	.708	.731	.740	.761	.765	.742	.707
" 3, ...	.731	.729	.725	.720	.721	.736	.754	.759	.765	.768	.755	.740	.726	.720	.696	.687	.693	.707	.723	.746	.769	.762	.750	.735	.747
" 4, ...	.739	.731	.727	.728	.742	.751	.758	.769	.783	.785	.787	.774	.751	.739	.723	.718	.701	.700	.716	.740	.750	.770	.778	.778	.747
" 5, ...	.778	.774	.765	.762	.774	.774	.783	.795	.802	.808	.813	.804	.786	.775	.762	.742	.739	.744	.756	.778	.795	.803	.805	.807	.780
" 6, ...	.798	.789	.785	.782	.782	.794	.803	.807	.815	.816	.819	.809	.798	.792	.786	.771	.768	.776	.792	.806	.820	.823	.809	.799	.797
" 7, ...	.790	.783	.771	† .778	* .777	* .777	.776	.782	.797	.786	.785	.777	.749	.741	.724	.730	.734	.757	.768	.771	.779	.779	.768	.769	.769
" 8, ...	.751	.747	.732	.745	.747	.748	.754	.764	.760	.772	.770	.752	.749	.727	.707	.712	.700	.704	.711	.713	.717	.734	.742	.729	.737
" 9, ...	.721	.700	.696	.715	.726	.736	.748	.756	.770	.773	.765	.740	.742	.730	.704	.691	.685	.686	.695	.712	.730	.768	.774	.763	.730
" 10, ...	.740	.735	.737	.725	.731	.751	.756	.769	.769	.769	.763	.759	.726	.718	.714	.714	.717	.716	.721	.743	.756	.763	.762	.749	.742
" 11, ...	.731	.718	.719	.718	.732	.748	.760	.763	.790	.785	.777	.758	.741	.731	.721	.696	.701	.701	.730	.755	.765	.779	.773	.761	.744
" 12, ...	.741	.725	.710	.707	.692	.701	.709	.729	.748	.754	.751	.739	.711	.692	.675	.671	.664	.670	.685	.703	.714	.722	.701	.684	.708
" 13, ...	.675	.661	.658	.658	.648	.653	.656	.663	.671	.677	.673	.652	.649	.631	.605	.594	.595	.604	.622	.627	.648	.657	.628	.625	.643
" 14, ...	.601	.592	.575	.585	.584	.591	.589	.594	.590	.587	.585	.570	.557	.546	.538	.520	.522	.538	.574	.587	.599	.628	.633	.618	.579
" 15, ...	.583	.578	.554	.546	.554	.550	.572	.583	.611	.619	.613	.607	.601	.587	.588	.592	.573	.589	.582	.623	.629	.644	.616	.623	.592
" 16, ...	.598	.581	.596	.592	.590	.605	.604	.617	.630	.633	.637	.630	.620	.608	.587	.587	.593	.599	.610	.632	.653	.670	.664	.628	.615
" 17, ...	.592	.556	.572	.569	.577	.603	.611	.638	.653	.653	.663	.652	.634	.620	.620	.604	.606	.609	.622	.654	.660	.656	.636	.622	.622
" 18, ...	.617	.635	.623	.612	.608	.621	.638	.639	.664	.677	.686	.686	.681	.675	.673	.671	.667	.675	.696	.722	.742	.760	.758	.738	.673
" 19, ...	.718	.713	.709	.683	.675	.670	.684	.711	.722	.736	.738	.729	.726	.722	.709	.699	.702	.712	.740	.750	.768	.772	.768	.759	.721
" 20, ...	.738	.728	.724	.730	.722	.736	.741	.755	.759	.757	.751	.740	.731	.726	.710	.696	.698	.712	.727	.753	.761	.770	.768	.752	.737
" 21, ...	.727	.707	.703	.695	.694	.699	.706	.715	.721	.718	.722	.706	.696	.678	.671	.656	.647	.646	.658	.672	.678	.681	.683	.673	.690
" 22, ...	.652	.647	.638	.644	.643	.649	.660	.669	.673	.669	.658	.641	.621	.602	.582	.565	.569	.565	.574	.580	.588	.600	.589	.576	.619
" 23, ...	.565	.550	.548	.546	.542	.552	.556	.571	.572	.576	.572	.549	.546	.528	.518	.506	.511	.519	.533	.547	.559	.561	.557	.542	.547
" 24, ...	.528	.517	.510	.512	.520	.521	.537	.538	.555	.560	.551	.532	.515	.495	.479	.475	.482	.494	.504	.530	.542	.555	.553	.537	.523
" 25, ...	.519	.511	.506	.515	.519	.532	.549	.555	.556	.554	.536	.520	.494	.497	.500	.490	.497	.497	.519	.537	.560	.573	.576	.568	.528
" 26, ...	.565	.540	.539	.540	.529	.553	.572	.568	.569	.568	.570	.568	.550	.538	.526	.522	.521	.510	.566	.578	.581	.597	.593	.570	.557
" 27, ...	.570	.565	.559	.544	.541	.572	.587	.600	.607	.618	.620	.607	.605	.578	.563	.541	.536	.557	.590	.607	.625	.637	.637	.649	.588
" 28, ...	.642	.637	.620	.617	.619	.634	.650	.661	.664	.677	.664	.656	.635	.624	.603	.600	.601	.601	.620	.642	.668	.689	.687	.681	.641
" 29, ...	.666	.656	.653	.652	.658	.676	.684	.697	.701	.712	.712	.698	.674	.653	.641	.627	.625	.638	.638	.654	.668	.690	.699	.686	.669
" 30, ...	.686	.675	.669	.667	.665	.678	.690	.717	.715	.721	.730	.704	.699	.682	.664	.636	.646	.666	.675	.694	.703	.699	.699	.685	.685
" 31, ...	.697	.681	.673	.667	.659	.669	.680	.697	.703	.705	.698	.692	.666	.656	.627	.615	.608	.618	.620	.639	.656	.662	.664	.664	.663
Hourly Means, }	29.673	29.662	29.657	29.655	29.655	29.666	29.675	29.686	29.695	29.699	29.697	29.685	29.671	29.657	29.644	29.634	29.632	29.640	29.635	29.673	29.687	29.700	29.697	29.686	29.670

* Interpolated.

† Approximate.

TEMPERATURE FOR THE MONTH OF JULY, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means	Max.	Min.		
July 1,.....	82.1	81.1	81.6	81.8	81.7	81.9	82.3	83.0	83.4	84.0	86.0	85.2	86.1	85.9	84.1	84.2	84.0	83.4	83.2	83.1	82.2	81.0	80.1	80.5	83.0	86.9	79.5		
" 2,.....	80.6	81.7	82.2	82.2	81.6	81.5	82.2	82.9	83.6	85.0	85.5	86.0	85.1	85.2	84.8	84.8	83.9	82.9	82.4	80.1	77.1	77.2	77.5	77.1	82.2	86.3	76.6		
" 3,.....	77.8	78.3	78.9	79.2	79.3	79.9	81.5	81.2	82.2	83.7	85.2	85.5	84.0	85.0	84.9	83.3	83.1	82.0	80.9	80.5	80.2	80.1	79.9	79.4	81.5	86.0	77.0		
" 4,.....	78.9	79.0	79.0	79.0	79.0	79.1	81.1	83.2	83.0	85.2	85.1	86.0	86.1	87.0	87.5	85.5	84.6	82.8	81.9	80.8	80.2	80.1	79.5	79.2	82.2	87.5	78.6		
" 5,.....	79.4	79.4	78.7	79.1	78.9	79.5	81.1	82.0	82.9	83.1	83.6	84.0	84.8	83.3	83.2	83.0	82.3	83.0	82.2	81.9	81.2	80.5	80.2	80.3	79.7	79.9	81.3	84.8	78.4
" 6,.....	80.0	80.0	79.7	79.7	79.7	79.9	82.2	82.8	82.5	83.4	84.2	84.1	84.2	84.2	84.1	84.0	83.3	83.2	83.0	81.1	80.8	80.5	80.3	80.6	80.5	81.8	84.2	79.7	
" 7,.....	81.2	79.9	78.9	77.9	78.1	78.5	80.0	80.9	83.2	83.5	83.2	82.0	76.3	78.0	76.5	77.4	77.2	77.7	77.8	77.2	77.4	77.9	76.1	75.5	78.9	84.7	75.7		
" 8,.....	76.6	76.9	77.0	75.3	75.3	75.4	76.0	76.2	76.9	77.4	77.7	76.0	76.6	78.7	78.7	78.7	77.3	78.3	77.9	77.6	77.3	77.6	77.3	77.7	79.2	75.1			
" 9,.....	77.6	77.1	77.2	76.0	75.4	74.9	75.9	76.9	75.8	75.8	76.5	78.1	79.0	79.9	80.3	77.1	76.7	77.0	76.1	75.7	76.1	76.2	76.5	76.9	76.9	80.3	74.8		
" 10,.....	77.0	76.0	76.0	74.6	74.6	75.6	76.7	78.0	79.8	80.9	81.1	81.1	81.9	81.4	81.2	81.0	80.3	80.0	79.2	79.0	78.9	79.2	79.2	78.8	78.8	81.9	74.5		
" 11,.....	78.6	78.2	79.2	78.6	78.5	78.0	79.2	81.5	79.1	82.2	81.8	82.8	83.6	82.8	83.0	82.5	82.2	81.9	81.0	80.0	81.0	81.1	80.9	80.8	83.9	78.0			
" 12,.....	80.1	80.5	80.5	78.3	79.8	79.9	81.0	82.0	82.3	83.0	83.1	82.7	83.9	82.4	84.0	82.2	83.0	82.0	81.2	80.9	80.9	81.0	80.7	80.6	81.5	85.2	77.7		
" 13,.....	80.1	79.9	80.1	80.3	79.5	79.3	81.2	83.0	83.6	83.9	84.0	84.5	84.8	85.4	85.0	84.2	81.9	81.3	81.4	81.2	81.1	81.0	81.3	80.7	82.0	85.4	79.3		
" 14,.....	80.0	79.9	79.7	79.7	79.2	79.0	80.6	81.0	83.3	83.8	83.8	84.0	84.9	84.2	82.0	83.8	81.8	80.3	80.5	80.3	80.5	78.7	78.9	79.8	81.2	84.9	78.6		
" 15,.....	81.1	82.2	81.9	82.6	80.7	81.4	79.5	81.0	76.5	77.5	77.3	78.0	79.2	78.9	76.0	76.3	75.9	77.1	77.4	76.1	76.2	76.9	77.0	77.0	78.5	82.6	73.9		
" 16,.....	76.6	75.8	76.0	77.3	76.8	76.2	75.4	75.0	75.2	75.8	76.2	75.7	76.5	77.3	77.9	78.9	78.8	77.6	77.1	76.8	76.9	77.4	77.3	76.7	78.9	75.0			
" 17,.....	76.7	75.9	76.7	77.3	77.2	76.9	76.8	78.0	78.0	79.0	78.6	78.4	78.9	79.3	79.0	77.7	78.2	79.3	79.6	80.7	76.7	77.7	78.2	80.7	75.9				
" 18,.....	78.6	79.1	79.0	79.4	80.0	77.8	77.7	76.9	77.3	77.7	77.7	77.8	78.6	78.6	76.0	77.0	79.0	79.1	79.2	78.2	77.8	77.9	78.0	77.1	77.6	78.1	80.0	75.8	
" 19,.....	77.0	76.9	77.3	77.4	77.6	78.0	78.4	78.8	79.0	79.0	81.1	80.5	81.7	81.6	81.2	81.3	80.2	79.5	79.1	78.9	78.2	77.8	77.7	77.7	79.1	82.4	76.9		
" 20,.....	78.0	78.1	77.9	77.9	78.0	78.2	77.7	78.7	81.0	80.7	81.2	81.8	81.3	81.0	82.0	81.2	81.2	80.2	79.4	79.3	79.2	79.0	79.1	79.0	79.6	82.5	76.8		
" 21,.....	78.6	78.4	78.1	77.5	77.7	77.7	79.0	80.0	80.7	81.5	81.0	82.3	82.1	82.7	82.0	81.8	80.2	79.2	79.0	78.8	78.6	78.6	78.8	78.8	82.7	77.5			
" 22,.....	78.1	78.2	77.8	77.4	77.8	77.8	79.8	81.0	81.9	82.1	82.0	83.0	83.5	82.5	83.5	81.3	81.0	80.6	80.0	79.5	78.0	79.0	78.8	79.2	80.2	83.5	77.4		
" 23,.....	78.5	79.1	77.7	77.3	78.8	77.7	78.6	80.1	80.8	81.5	83.6	83.0	83.6	84.5	84.0	82.9	83.1	82.4	82.2	82.0	82.0	81.4	80.4	80.3	81.1	84.5	76.5		
" 24,.....	81.0	80.7	80.3	80.2	80.3	80.6	81.3	82.2	83.1	84.1	84.5	85.9	85.6	85.0	85.4	84.5	84.4	82.5	82.2	82.1	82.0	81.0	81.1	81.3	82.6	85.9	79.5		
" 25,.....	81.5	80.9	80.8	80.4	80.4	80.3	80.8	83.6	85.5	84.0	85.3	86.9	87.5	83.9	83.2	82.8	82.0	82.4	81.3	81.1	80.7	80.6	80.1	82.4	88.4	80.0			
" 26,.....	77.8	78.2	78.2	77.3	77.9	77.5	78.4	79.0	81.7	82.0	82.5	83.0	82.2	83.8	83.5	81.9	82.3	80.7	79.0	79.8	80.0	80.2	80.0	79.6	80.3	84.1	77.1		
" 27,.....	79.2	79.0	78.9	78.5	79.0	78.3	77.2	78.8	79.0	75.6	78.4	78.8	81.9	84.1	84.3	84.6	84.4	82.2	82.0	82.0	81.4	80.8	80.7	80.7	80.4	85.1	75.3		
" 28,.....	80.4	80.4	81.2	80.9	80.8	81.6	82.4	83.2	84.8	84.7	84.7	85.1	86.5	87.0	86.3	85.7	84.0	83.3	82.4	82.1	82.0	82.0	81.9	81.6	83.1	87.0	80.1		
" 29,.....	80.8	80.2	80.0	80.6	81.0	80.6	80.9	82.7	83.7	84.1	85.0	86.0	86.7	86.7	87.0	84.8	83.9	83.1	82.8	82.5	82.1	81.8	81.7	83.1	87.8	79.9			
" 30,.....	81.9	82.3	82.4	82.3	82.0	81.8	83.0	82.7	85.0	85.0	84.3	85.8	85.4	85.3	85.4	84.6	83.9	82.9	82.0	81.8	81.7	81.5	81.3	81.0	83.1	85.8	81.0		
" 31,.....	81.1	81.2	81.3	80.8	80.3	79.1	79.2	80.0	82.8	84.0	85.1	86.1	87.4	86.4	87.3	85.6	84.7	84.0	82.9	82.8	82.9	82.2	82.4	83.0	88.1	78.5			
Hourly Means,	79.3	79.2	79.2	78.9	78.9	78.8	79.6	80.5	81.2	81.7	82.2	82.6	82.9	82.9	82.7	82.2	81.7	81.1	80.4	80.0	79.7	79.7	79.5	79.4	80.6	84.2	77.4		

TABLE III.

TEMPERATURE OF EVAPORATION AND RADIATION, FOR THE MONTH OF JULY, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.	Sun.	Rad.	
July 1,.....	77.8	77.5	77.5	77.8	78.0	78.0	78.1	78.5	78.8	79.6	79.8	79.7	79.4	78.8	78.7	78.6	78.0	78.1	78.6	78.0	78.2	78.3	78.4	147.5	77.9			
" 2,.....	78.0	77.8	78.0	77.5	78.2	78.2	78.9	78.4	79.1	78.7	78.5	79.9	78.8	78.7	78.5	78.4	77.8	77.6	77.8	76.0	76.0	75.8	76.2	75.6	77.8	148.6	75.4	
" 3,.....	76.5	76.8	77.1	77.2	77.2	77.7	78.8	78.7	78.6	78.6	79.0	78.1	78.0	78.2	77.6	76.6	76.4	76.2	75.9	75.7	75.8	76.0	75.9	77.2	144.7	75.0		
" 4,.....	76.3	76.3	76.0	76.0	76.4	77.2	78.2	78.5	77.5	78.1	77.1	76.8	77.3	78.0	78.6	76.1	77.1	76.8	76.8	76.6	76.6	76.8	76.6	77.0	149.0	74.3		
" 5,.....	76.6	76.9	76.3	76.3	76.4	76.5	77.1	76.8	76.6	76.4	76.5	76.7	77.6	77.5	77.7	77.1	77.7	77.7	76.8	76.8	76.9	77.0	77.2	76.9	141.5	74.9		
" 6,.....	77.6	77.6	77.5	77.4	77.3	78.0	78.1	78.6	78.5	78.9	78.7	78.8	77.7	78.6	77.9	77.8	78.5	77.4	77.5	76.5	75.7	77.1	77.6	77.8	148.7	77.4		
" 7,.....	77.6	77.1	76.8	74.0	74.6	74.8	75.9	77.0	77.4	77.1	77.6	75.5	74.9	75.5	74.8	75.4	76.0	75.7	74.3	74.7	74.6	74.2	73.5	73.2	75.5	146.7	73.8	
" 8,.....	74.6	74.9	75.2	74.0	73.6	73.4	74.2	74.6	74.6	75.8	73.6	73.8	74.7	74.9	76.4	75.7	74.9	75.4	75.1	75.2	75.5	74.8	75.1	74.8	105.2	73.4		
" 9,.....	75.5	75.6	75.8	74.5	73.8	73.2	73.6	74.3	74.2	74.1	73.9	73.8	74.1	74.7	74.9	72.8	73.8	73.3	73.6	72.8	73.9	73.6	73.2	74.0	74.0	126.9	72.0	
" 10,.....	74.6	73.2	73.0	72.5	72.3	72.8	73.6	75.4	75.9	76.8	76.8	76.7	77.4	77.3	77.7	76.3	76.6	75.8	76.0	76.1	76.1	76.4	76.2	76.2	75.5	156.8	72.2	
" 11,.....	75.7	76.0	77.4	76.7	76.6	77.1	77.6	78.7	77.1	78.7	78.2	78.8	79.6	78.6	78.7	77.9	77.8	77.6	77.1	77.6	78.3	78.8	78.1	77.8	77.8	145.1	75.7	
" 12,.....	78.4	77.6	77.5	76.2	76.8	77.1	77.6	77.7	77.6	78.1	78.2	77.9	78.6	78.6	78.5	78.5	78.0	77.8	77.8	77.6	77.0	77.6	77.5	77.6	143.1	75.0		
" 13,.....	77.6	77.2	76.8	77.5	77.8	77.3	77.5	77.6	77.9	77.7	77.6	77.6	76.9	77.1	78.3	78.8	76.3	76.8	77.0	77.6	77.5	77.6	77.4	77.4	149.4	76.2		
" 14,.....	76.5	76.2	76.4	76.2	74.6	75.4	76.9	76.5	76.4	76.6	78.4	77.5	79.0	78.7	78.4	79.3	77.9	77.7	77.3	78.3	78.6	77.8	76.5	76.9	77.2	136.0	75.8	
" 15,.....	76.5	77.5	77.5	77.6	76.4	76.3	76.7	77.5	75.5	76.5	75.4	76.5	78.5	77.5	75.0	75.5	74.9	75.9	75.7	74.1	74.7	75.1	75.2	75.3	76.1	88.4	70.9	
" 16,.....	74.0	73.3	73.4	75.6	75.3	75.1	74.3	73.7	73.5	74.1	74.5	73.9	75.0	75.4	75.5	75.1	74.3	73.7	73.3	78.4	74.0	74.6	74.8	75.5	74.4	112.0	72.4	
" 17,.....	75.7	75.4	75.1	75.6	75.6	74.8	74.4	74.2	75.2	75.5	75.2	74.5	75.4	75.9	75.5	74.1	74.6	75.3	75.4	75.0	72.9	75.7	75.6	74.6	75.0	105.4	71.9	
" 18,.....	74.7	74.7	74.5	74.5	75.8	74.3	74.1	73.8	75.1	75.4	74.3	74.3	76.7	72.7	73.8	75.2	74.9	74.3	74.6	74.5	73.7	74.2	73.7	73.7	74.5	94.8	72.9	
" 19,.....	73.5	74.3	74.0	74.2	74.7	74.5	75.2	75.5	75.9	76.0	76.5	76.5	76.2	76.7	76.6	76.5	76.8	74.9	75.5	75.4	75.0	75.7	75.3	75.4	138.8	72.9		
" 20,.....	75.5	75.2	75.1	75.1	74.9	74.9	74.1	74.6	76.8	76.5	77.1	76.5	76.9	76.6	77.0	76.6	77.2	75.7	75.6	75.6	76.0	75.8	75.7	75.2	74.7	75.8	144.7	73.8
" 21,.....	74.9	75.1	74.5	74.3	74.3	74.9	75.0	75.5	75.7	76.5	77.2	76.7	76.7	76.1	75.0	75.4	75.4	75.1	74.4	74.0	74.1	74.2	74.1	74.6	75.2	139.9	72.5	
" 22,.....	74.8	75.0	74.7	74.5	75.4	75.9	76.5	75.0	75.5	75.3	74.6	75.7	76.2	77.5	76.0	75.5	76.1	75.9	75.1	76.1	75.5	74.7	75.5	75.5	144.1	72.9		
" 23,.....	74.7	75.5	74.9	75.4	76.2	75.0	76.6	77.4	77.3	77.7	78.3	78.6	78.6	79.2	78.5	77.0	76.8	76.5	76.7	77.8	76.7	76.7	77.4	77.0	76.9	151.7	74.9	
" 24,.....	77.3	77.2	77.2	77.6	78.2	77.9	78.5	78.7	78.3	78.5	79.5	79.7	78.7	78.0	79.0	78.6	78.4	77.9	75.6	76.0	75.8	75.7	75.2	74.7	75.8	144.7	73.8	
" 25,.....	78.0	78.2	77.9	78.1	77.9	77.8	78.5	80.2	79.5	79.6	79.6	79.5	78.4	78.4	78.9	77.4	78.5	78.5	78.3	77.8	77.8	77.9	77.4	77.6	78.5	147.3	76.2	
" 26,.....	76.0	76.3	76.2	76.0	76.2	76.1	76.7	75.6	77.7	78.5	78.0	78.5	78.2	78.4	78.4	78.3	78.2	77.9	75.9	76.9	76.7	76.5	76.2	75.1	77.0	148.3	74.6	
" 27,.....	75.3	75.0	75.6	75.4	75.1	75.5	74.9	76.5	75.9	74.5	76.5	76.3	77.3	78.7	78.3	77.6	76.5	77.7	77.5	77.3	77.2	77.4	77.4	77.7	76.5	146.1	74.7	
" 28,.....	77.1	77.2	77.1	77.1	77.4	77.3	78.3	79.0	78.5	78.6	78.3	79.0	79.5	81.0	79.6	79.5	79.3	79.0	78.7	78.3	78.7	79.1	78.2	76.9	78.4	148.8	77.6	
" 29,.....	77.5	77.4	77.1	76.8	77.4	78.1	78.6	79.5	79.5	79.6	79.2	80.5	78.7	79.9	79.0	79.5	78.6	78.2	77.8	77.7	77.1	77.5	77.8	77.8	78.4	146.8	77.1	
" 30,.....	78.0	77.6	77.6	77.8	76.7	76.8	78.5	76.5	79.5	79.5	79.6	79.1	78.7	79.4	79.4	79.2	78.3	78.3	78.6	78.0	77.8	77.8	77.9	78.1	78.3	142.4	77.7	
" 31,.....	77.9	77.3	77.5	76.8	77.0	76.2	76.6	77.4	78.6	79.1	79.2	80.2	78.4	79.1	79.0	78.7	78.6	78.4	78.2	77.8	77.4	77.8	77.8	78.0	78.0	146.9	76.7	
Hourly Means,	76.3	76.2	76.2	76.0	76.1	76.1	76.6	76.8	77.1	77.2	77.4	77.3	77.6	77.6	77.4	77.2	76.9	76.7	76.5	76.4	76.3	76.3	76.7	138.1	74.7			

TABLE IV.

**N HOURLY AND DAILY RELATIVE HUMIDITY AND TENSION OF AQUEOUS VAPOUR
FOR THE MONTH OF JULY, 1886.**

UR.	HOURLY MEAN.		DATE.	DAILY MEAN.	
	Humidity.	Tension.		Humidity.	Tension.
			1886.		
a	87	0.867	July 1,.....	81	0.911
"	87	0.864	2,.....	81	0.894
"	87	0.864	3,.....	82	0.877
"	87	0.859	4,.....	78	0.859
"	88	0.864	5,.....	81	0.866
"	88	0.865	6,.....	83	0.900
"	87	0.877	7,.....	84	0.838
"	84	0.873	8,.....	90	0.833
"	83	0.877	9,.....	86	0.802
"	81	0.874	10,.....	85	0.839
"	80	0.877	11,.....	87	0.914
on.	78	0.867	12,.....	84	0.899
P	78	0.876	13,.....	81	0.879
"	78	0.876	14,.....	83	0.881
"	78	0.870	15,.....	89	0.869
"	79	0.868	16,.....	89	0.821
"	80	0.861	17,.....	85	0.826
"	81	0.860	18,.....	84	0.807
"	82	0.861	19,.....	83	0.832
"	85	0.863	20,.....	83	0.842
"	85	0.863	21,.....	80	0.813
"	86	0.867	22,.....	79	0.821
"	86	0.865	23,.....	82	0.869
dt.	87	0.866	24,.....	81	0.907
			25,.....	83	0.923
			26,.....	86	0.885
			27,.....	83	0.863
			28,.....	80	0.910
			29,.....	80	0.910
			30,.....	80	0.905
			31,.....	79	0.893
enn,	83	0.868	Mean,.....	83	0.867

TABLE V.
DURATION OF SUNSHINE.

TABLE VI.
RAINFALL FOR THE MONTH OF JULY, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Sums.
July 1, .....	...	...	...	0'020	...	0'020	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0'100	0'095	0'100	0'335
" 2, .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0'100	0'110	...	0'060	...	0'270
" 3, .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" 4, .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" 5, .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" 6, .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" 7, .....	...	...	0'060	...	...	...	...	0'010	...	...	...	0'265	...	0'180	0'010	0'240	...	...	...	...	0'010	0'010	...	0'785
" 8, .....	...	...	0'355	0'490	0'065	0'075	0'020	0'070	0'035	...	0'010	0'105	0'070	...	0'015	...	0'170	...	...	...	...	...	...	1'480
" 9, .....	...	...	0'010	0'100	0'110	0'010	...	0'010	0'030	0'180	0'020	...	...	0'060	0'010	0'005	...	...	...	...	...	...	...	0'545
" 10, .....	...	...	0'005	0'045	0'005	0'010	...	...	...	...	...	0'090	0'070	...	...	...	...	...	...	0'025	0'030	0'030	...	0'065
" 11, .....	...	0'025	0'060	...	0'015	0'110	...	0'165	0'410	...	...	0'090	0'070	...	...	...	...	...	...	0'025	0'030	0'030	0'195	1'225
" 12,	0'040	0'005	0'065	0'025	0'025	...	...	0'020	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0'180
" 13, .....	...	...	...	...	0'070	0'010	...	...	...	...	...	...	...	...	0'015	...	...	...	...	...	...	...	...	0'095
" 14, .....	...	...	...	...	...	0'020	...	...	...	...	...	...	...	...	...	0'025	0'055	0'030	0'350	0'700	0'220	0'110	...	1'520
" 15,	0'100	0'020	...	0'020	0'120	0'080	0'560	0'100	0'425	0'330	0'160	0'120	0'030	0'900	3'480	2'840	2'290	0'575	0'200	0'595	0'180	0'140	0'100	0'115	13'480
" 16,	0'110	0'010	0'005	0'170	0'220	0'380	0'235	0'150	0'080	0'010	0'010	0'030	0'005	0'015	0'230	...	1'660
" 17,	0'260	0'275	0'045	0'110	0'200	0'150	0'090	0'020	0'080	0'015	0'020	0'035	0'020	0'005	0'120	0'060	0'090	...	0'020	...	0'590	0'025	...	0'070	2'300
" 18,	0'290	0'010	0'045	0'090	0'165	0'095	0'060	0'120	0'075	0'265	...	0'040	...	0'050	1'305
" 19, .....	...	...	...	...	...	...	...	0'020	0'310	...	0'075	...	...	...	...	...	...	...	...	...	0'035	...	...	0'440
" 20, .....	...	...	...	...	0'040	0'060	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0'100
" 21,	0'075	0'015	...	0'010	0'030	0'005	0'170	0'065
" 22,	0'030	0'025	0'200	...	...	0'075	...	0'035	0'005	...	...	0'075	0'015	...	0'010	...	...	0'030	0'005	0'170	0'065	...	...	0'390
" 23, .....	...	...	0'065	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0'070	...	...	...	0'440
" 24, .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0'065
" 25,	0'400	...	0'045	...	0'005	...	0'060	0'015	...	...	...	...	...	...	...	0'005	0'010	0'005	...	...	...	...	...	0'030
" 26, .....	...	...	...	...	0'015	0'015	0'020	0'055	0'005	0'655	0'075	...	...	...	...	0'005	0'010	0'005	...	...	...	...	...	0'545
" 27, .....	...	...	...	...	...	...	0'030	...	...	...	0'065	0'010	...	...	...	...	...	...	...	...	...	...	...	0'840
" 28, .....	...	...	...	...	...	...	0'030	...	...	...	0'065	0'010	...	...	...	...	...	...	...	...	...	...	...	...
" 29, .....	...	...	...	...	...	...	0'015	0'020	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0'030
" 30, .....	...	...	...	...	...	...	0'015	0'020	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0'075
" 31, .....	...	...	...	...	...	...	0'015	0'020	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0'035
Sums,.....	0'940	0'360	0'915	0'980	1'195	1'075	1'030	0'720	1'275	1'680	0'365	0'485	0'630	1'255	3'855	2'985	2'800	0'610	0'370	0'755	1'430	1'175	0'515	0'835	28'235

TABLE VII.

DIRECTION AND VELOCITY OF THE WIND FOR THE MONTH OF JULY, 1886.

DATE.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Sums.	Means.																								
	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.																																
July 1,	19	13	19	17	19	20	19	23	19	25	19	22	20	17	19	21	20	20	19	21	19	22	19	21	20	19	17	21	10	25	5	28	8	24	9	432	18.0													
" 2,	18	5	19	13	18	11	19	14	20	10	20	11	20	12	20	12	20	14	19	9	18	12	18	11	18	14	18	17	20	16	18	17	19	1	26	13	30	7	30	3	1	6	271	11.3						
" 3,	3	6	6	8	6	7	6	6	6	6	6	6	6	6	6	3	6	2	32	3	21	2	21	7	20	8	18	9	18	1	18	12	18	10	18	10	18	8	18	3	18	4	...	0	18	2	18	3	148	6.2
" 4,	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4.7					
" 5,	17	4	17	17	5	17	3	17	5	17	2	17	4	17	7	12	12	11	10	14	10	14	8	18	8	18	8	16	8	19	8	12	8	12	8	17	6	17	2	17	3	17	5	17	4	113	4.7			
" 6,	8	16	8	13	8	11	8	10	8	8	6	8	5	8	7	8	16	8	17	9	23	9	24	9	24	9	21	9	25	9	23	9	21	9	19	10	20	8	20	8	13	8	8	9	380	15.8				
" 7,	8	8	4	5	3	4	7	15	7	17	8	13	7	12	6	16	8	25	8	24	7	22	7	14	8	25	9	6	14	7	10	8	9	8	10	10	10	11	7	13	10	14	4	7	3	289	12.0			
" 8,	7	3	7	5	10	5	11	11	7	10	7	7	7	6	9	5	10	5	10	11	6	15	9	16	9	20	2	14	2	8	5	17	5	17	2	16	7	...	1	16	3	7	4	7	4	133	5.5			
" 9,	7	5	7	5	9	12	10	22	10	14	7	12	7	14	8	26	9	20	14	15	12	11	4	14	11	14	12	18	11	18	6	23	3	29	2	32	4	...	1	9	7	9	12	8	10	247	10.3			
" 10,	8	8	8	16	14	12	7	16	8	11	10	11	8	12	9	11	6	11	7	10	9	10	8	14	8	15	8	20	8	17	8	16	7	15	6	17	6	19	7	18	6	17	6	20	342	14.2				
" 11,	7	14	7	12	10	11	6	18	7	16	10	16	8	17	7	18	8	11	7	20	7	16	9	19	8	23	8	19	8	12	10	20	9	22	10	22	9	22	434	18.1										
" 12,	9	22	8	22	10	21	9	19	8	22	8	23	7	18	7	19	7	22	7	23	7	20	7	18	7	14	8	17	8	17	9	14	9	15	10	12	10	7	10	5	417	17.4								
" 13,	10	6	10	11	9	8	9	7	9	5	6	10	6	10	6	14	7	17	7	19	7	20	7	22	7	23	7	24	7	21	7	19	6	15	7	16	8	17	9	10	8	9	9	357	14.9					
" 14,	6	3	2	6	30	6	30	5	31	10	28	7	31	4	32	6	32	7	29	8	28	10	27	12	24	9	27	6	19	5	14	7	5	9	5	6	5	4	5	9	30	6	16	9	17	9	165	6.9		
" 15,	18	27	18	24	17	28	18	23	17	26	19	28	18	29	19	18	21	22	27	9	18	5	8	5	6	7	13	15	13	18	8	14	15	20	11	14	15	1	18	8	2	7	15	21	15	28	15	18	431	18.0
" 16,	14	15	8	4	8	7	8	16	6	32	7	4	4	4	2	4	3	29	4	29	2	29	3	25	8	9	12	9	12	7	12	6	11	8	10	6	15	8	12	6	15	5	155	6.5						
" 17,	14	31	15	34	15	30	15	26	15	27	17	24	16	18	16	16	15	14	16	23	15	21	14	26	14	29	14	24	13	28	14	25	14	29	14	24	13	27	15	24	14	29	14	30	14	38	627	26.1		
" 18,	13	30	13	22	13	22	12	28	12	29	19	34	12	27	13	25	10	19	13	14	13	21	13	19	11	18	15	19	7	13	18	14	12	13	15	15	18	15	19	14	17	14	8	14	10	461	19.2			
" 19,	14	6	12	10	12	11	14	19	8	22	7	21	7	18	7	22	9	19	10	28	9	30	19	22	11	23	9	24	9	22	10	21	10	17	16	14	10	15	10	12	10	11	9	9	9	430	17.9			
" 20,	9	8	9	7	9	8	9	7	9	8	9	13	5	8	5	11	6	15	7	20	7	20	8	19	8	20	9	18	9	16	9	13	9	11	10	12	10	9	10	11	11	10	304	12.7						
" 21,	11	9	11	5	11	5	11	3	10	4	9	2	7	4	7	3	7	5	7	8	11	10	9	8	7	6	7	12	10	8	10	6	14	8	13	7	12	6	12	2	12	3	144	6.0						
" 22,	12	2	9	6	9	2	0	0	0	0	12	4	13	4	16	7	16	8	16	11	16	6	15	11	16	7	16	12	16	11	16	7	17	7	18	11	19	11	18	9	17	13	164	6.8						
" 23,	17	13	18	15	22	16	18	11	20	9	20	11	22	8	22	9	23	10	28	4	20	11	17	12	19	16	19	13	19	16	19	10	20	6	17	8	16	4	16	7	18	7	258	10.8						
" 24,	18	9	19	7	19	9	23	7	24	7	22	11	22	8	22	12	19	15	20	14	20	12	19	10	19	12	20	10	18	19	17	10	17	6	18	3	...	1	0	...	1	17	3	24	3	189	7.9			
" 25,	25	3	0	24	2	24	2	0	0	0	0	24	2	25	4	26	7	23	6	22	5	23	5	6	7	5	5	8	13	5	12	7	16	8	18	8	15	7	13	7	14	7	13	10	11	173	7.2			
" 26,	6	14	10	6	10	3	10	4	7	7	8	9	11	5	10	7	13	7	16	9	20	9	21	10	21	8	16	7	17	8	15	7	10	6	11	6	11	340	14.2											
" 27,	8	6	1	7	2	7	7	14	8	17	8	9	7	7	5	6	23	11	28	5	28	4	28	10	28	7	20	5	26	5	20	5	16	9	16	5	14	4	14	5	157	6.5								
" 28,	14	5	14	5	18	10	18	4	18	5	18	6	18	4	17	5	16	8	15	7	15	6	16	4	26	5	17	8	17	9	16	5	15	2	16	5	16	3	143	6.0										
" 29,	1	0	...	0	24	3	18	7	22	5	25	2	26	4	26	7	26	8	25	12	23	14	23	13	23	11	20	13	19	12	19	8	18	5	18	7	18	3	18	2	...	0	0	...	0	142	5.9		
" 30,	0	18	3	18	5	18	6	21	6	20	6	20	3	22	5	27	3	17	6	17	8	16	9	17	8	16	5	17	6	16	5	20	4	20	4	18	5	...	0	18	2	18	3	116	4.8				
" 31,	17	4	17	6	17	5	21	6	19	6	23	10	26	4	26	2	26	3	27	7	27	9	26	9	20	11	24	11	16	11	18	13	18	14	19	11	19	9	18	12	18	10	18	11	206	8.6				
Sums,	297	...	292	...	298	...	334	...	343	...	350	...	300	...	313	...	356	...	370	...	409	...	393	...	441	...	418	...	435	...	435	...	413	...	378	...	356	...	331	...	304	...	279	...	283	...	301	8435	351.5
Hourly Means,	9.6	...	9.4	...	9.6	...	10.8	...	11.1	...	11.4	...	9.7	...	10.2	...	11.5	...	11.9	...	13.2	...	12.7	...	14.2	...	13.5	...	14.0	...	14.0	...	13.3	...	12.2	...	11.5	...	10.7	...	9.8	...	9.0	...	9.1	...	9.7	272.1	11.3

TABLE VIII.

MEAN HOURLY COMPONENTS AND MEAN DIRECTION OF THE WIND, FOR JULY, 1886.

Hour.	Components (miles per hour).						Dir.
	N	E	S	W	+ N-S	+ E-W	
1 a.	0.3	5.2	4.6	0.8	-4.3	+ 4.4	E 4
2 "	0.4	4.7	4.6	1.3	4.2	3.4	E 5
3 "	0.3	4.0	5.4	1.5	5.1	2.5	E 6
4 "	0.4	5.3	5.1	1.9	4.6	3.4	E 4
5 "	0.4	5.8	4.5	1.6	4.1	4.2	E 4
6 "	0.6	6.0	4.0	2.7	3.5	3.3	E 4
7 "	0.5	5.5	3.3	1.7	2.8	3.8	E 3
8 "	1.0	5.7	3.1	2.1	2.1	3.6	E 3
9 "	1.1	6.5	2.5	2.8	1.5	3.7	E 2
10 "	1.1	6.4	3.6	2.5	2.5	3.9	E 3
11 "	0.9	7.4	4.3	2.8	3.4	4.6	E 3
Noon.	0.5	7.5	3.9	2.4	3.5	5.1	E 4
1 p.	0.6	7.7	4.8	3.0	4.2	4.7	E 4
2 "	0.5	6.9	4.9	3.0	4.5	4.0	E 4
3 "	0.7	8.5	4.7	2.0	4.1	6.5	E 2
4 "	0.1	8.1	5.6	2.2	5.5	5.9	E 3
5 "	0.3	7.0	6.0	1.8	5.7	5.2	E 4
6 "	0.2	6.8	5.4	1.6	5.2	5.3	E 4
7 "	0.4	6.4	5.0	1.5	4.6	4.8	E 4
8 "	0.5	5.9	4.5	1.2	4.0	4.7	E 4
9 "	0.8	5.6	3.9	0.8	3.1	4.9	E 3
10 "	0.3	5.4	3.6	0.7	3.3	4.7	E 3
11 "	0.5	5.0	4.2	0.5	3.7	4.5	E 3
Midt.	0.5	4.9	4.6	0.6	-4.0	+ 4.3	E 4
Mean,.....	0.5	6.2	4.4	1.8	-3.9	+ 4.4	E 4

TABLE IX.

DIRECTION AND FORCE OF THE WIND AT VICTORIA PEAK, AND SEA DISTURBANCES.

DATE.	4 a.			10 a.			4 p.			10 p.	
	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.
1886.											
July 1,.....	3	SW	6	3	SW	6	3	SW	6
" 2,.....	3	S	5	3	S	6	3	S	6
" 3,.....	0	S	5	1	SW	6	1	SW	5
" 4,.....	SW	4	0	S	5	0	S	4
" 5,.....	0	S	3	0	E	3	...	SE	3
" 6,.....	SE	4	...	E	5	...	E	5
" 7,.....	2	E	5	3	SE	6	2	SE	5
" 8,.....	1	SSW	5	1	S	4	1	S	5
" 9,.....	1	SE	6	1	SW	5	2	SSE	4
" 10,.....	1	ESE	4	1	ESE	5	2	E	5
" 11,.....	3	SE	5	2	E	4	3	E	6
" 12,.....	3	ESE	5	3	E	5	3	E	6
" 13,.....	2	E	5	3	E	5	3	E	5
" 14,.....	0	N	4	0	WNW	5	0	SSW	7
" 15,.....	3	SSW	5	0	SW	5	3	SW	7
" 16,.....	2	E	3	2	E	3	1	SW	5
" 17,.....	2	SSW	6	2	S	7	2	S	6
" 18,.....	3	S	5	2	S	5	2	SE	5
" 19,.....	1	SE	5	2	SE	4	1	SE	4
" 20,.....	1	ESE	3	2	E	4	1	SE	6
" 21,.....	0	S	3	2	SSW	3	1	SSE	5
" 22,.....	0	SSW	5	2	SSW	5	2	SSW	5
" 23,.....	2	SSW	5	3	SW	6	3	SW	6
" 24,.....	2	SW	6	2	SW	5	2	SW	5
" 25,.....	0	SSW	4	1	SSW	3	0	SW	5
" 26,.....	2	ESE	4	2	SE	4	2	E	6
" 27,.....	3	SE	5	2	SW	3	0	SW	4
" 28,.....	0	SSE	4	1	SW	4	1	S	4
" 29,.....	SSW	3	2	SW	4	2	SW	5
" 30,.....	1	S	4	1	S	5	1	S	4
" 31,.....	2	S	4	2	SW	6	2	SSW	6
Mean,.....	1.5	E 76° S	4.5	1.7	E 89° S	4.7	1.7	E 83° S	5.2

TABLE X.
VICTORIA PEAK.

E.	BAROMETER.			TEMPERATURE.							
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	Sun.	Max.	Min.	Rad.	
1.	ins.	ins.	ins.	°	°	°	°	°	°	°	°
2.	28.001	27.958	28.022	74.8	75.4	74.4	135.0	76.7	73.8	74.2	
3.	.034	28.014	.050	75.8	75.4	74.8	141.0	77.4	71.8	72.2	
4.	.074	.018	.047	75.0	74.2	73.4	137.0	76.5	73.4	72.2	
5.	.109	.051	.079	74.8	76.4	73.8	141.0	79.2	73.2	73.4	
6.	.111	.066	.110	77.4	79.0	75.5	142.0	79.4	72.8	72.2	
7.	.136	.099	.137	77.4	78.5	75.2	151.0	81.0	73.8	69.2	
8.	.101	.038	.070	75.6	74.0	72.2	137.0	77.0	72.8	72.2	
9.	.074	28.020	.034	71.8	71.8	72.2	113.0	74.4	70.8	68.2	
10.	.056	27.987	.062	70.5	70.4	71.2	117.0	73.8	69.8	67.2	
11.	.070	28.037	.067	71.8	74.0	73.2	135.0	75.2	70.2	67.2	
12.	.089	.023	.086	73.6	75.6	74.5	133.6	76.2	72.9	71.2	
13.	.060	.009	.024	74.3	76.4	74.4	131.0	77.2	73.4	71.2	
14.	27.992	27.929	27.968	75.8	76.8	74.5	138.2	78.2	73.8	71.2	
15.	.912	.868	.863	75.5	76.0	74.0	143.1	77.6	71.9	71.3	
16.	.925	.894	.910	74.4	73.6	72.2	85.2	75.2	70.8	67.2	
17.	.950	.913	.970	72.2	72.5	72.0	107.0	73.4	70.8	68.2	
18.	.949	.918	.900	71.8	71.0	71.5	88.0	73.8	70.9	68.2	
19.	.979	.990	.962	72.0	71.4	70.8	88.8	73.4	70.8	70.3	
20.	28.024	28.018	28.014	72.0	73.6	72.6	135.0	76.0	70.8	71.4	
21.	.051	27.994	.071	72.8	74.5	72.6	138.2	75.8	71.8	69.3	
22.	.029	.991	27.999	73.6	74.6	72.5	144.0	76.1	71.4	69.2	
23.	27.983	.906	.876	72.5	74.6	73.2	141.2	75.8	71.2	70.2	
24.	.891	.832	.839	73.6	74.4	74.6	132.2	75.9	70.8	71.2	
25.	.875	.823	.875	74.8	75.3	74.8	140.2	77.4	73.9	74.3	
26.	.880	.841	.898	75.6	76.4	74.6	127.4	78.2	74.0	72.4	
27.	.904	.859	.908	74.8	75.4	74.4	135.2	77.4	72.8	73.6	
28.	.929	.888	.895	72.2	76.6	74.4	147.0	77.0	71.0	72.4	
29.	.991	.945	.969	75.6	77.6	76.4	144.0	79.2	73.8	73.2	
30.	28.018	.967	.998	76.2	76.4	75.0	149.0	78.2	73.8	74.2	
31.	.041	.989	.984	75.4	77.4	74.2	140.0	79.4	73.8	73.2	
32.	27.975	.962	.976	75.0	75.6	75.4	141.0	77.5	73.8	74.2	
33.	28.007	27.963	27.989	74.1	75.0	73.7	131.6	76.8	72.3	71.2	

TABLE XI.
HUMIDITY AT THE OBSERVATORY AND AT VICTORIA PEAK.

E. 36.	RELATIVE HUMIDITY.			TENSION OF AQUEOUS VAPOUR.								
	OBSERVATORY.			VICTORIA PEAK.			OBSERVATORY.			VICTORIA PEAK.		
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.
1.	78	77	87	99	98	100	0.916	0.908	0.920	0.856	0.856	0.853
2.	75	74	93	98	99	96	.897	.886	.874	.876	.873	.831
3.	79	73	81	98	93	90	.911	.826	.835	.854	.783	.745
4.	72	63	85	88	82	98	.868	.775	.870	.767	.747	.819
5.	72	78	85	82	86	91	.820	.879	.881	.774	.852	.798
6.	79	77	80	92	82	87	.911	.883	.828	.864	.801	.762
7.	73	91	83	88	94	91	.845	.855	.797	.781	.793	.748
8.	87	90	91	96	97	96	.821	.880	.856	.750	.766	.761
9.	92	81	88	95	95	96	.821	.750	.795	.706	.708	.735
10.	83	79	88	97	95	97	.868	.844	.873	.766	.801	.791
11.	85	81	88	99	91	95	.935	.895	.932	.822	.801	.814
12.	79	84	85	96	95	95	.898	.926	.902	.817	.873	.812
13.	75	77	85	98	90	94	.867	.913	.902	.868	.826	.802
14.	71	81	91	91	92	94	.820	.942	.897	.806	.828	.793
15.	95	96	92	98	96	94	.901	.874	.848	.828	.798	.745
16.	92	83	87	94	98	97	.821	.821	.821	.745	.780	.763
17.	84	84	82	98	96	96	.837	.795	.836	.769	.730	.746
18.	90	83	83	97	100	96	.850	.824	.795	.767	.770	.725
19.	87	79	89	97	90	93	.858	.850	.856	.763	.751	.740
20.	81	81	86	98	91	94	.857	.855	.845	.792	.778	.752
21.	78	73	80	91	86	95	.846	.792	.787	.758	.739	.757
22.	72	75	81	95	89	91	.786	.806	.803	.761	.770	.748
23.	84	75	80	100	100	99	.899	.849	.856	.826	.853	.846
24.	77	76	87	99	95	98	.901	.900	.915	.856	.841	.848
25.	81	83	88	99	91	99	.948	.936	.920	.874	.832	.850
26.	85	85	84	98	92	95	.929	.921	.864	.848	.807	.812
27.	95	72	86	94	94	95	.841	.853	.897	.745	.866	.812
28.	76	75	87	95	89	91	.897	.925	.957	.845	.845	.827
29.	81	70	81	95	94	96	.952	.907	.882	.863	.860	.836
30.	77	78	84	92	95	93	.934	.935	.904	.807	.894	.782
31.	79	72	77	96	98	95	.930	.890	.867	.836	.870	.843
32.	81	79	85	95	93	95	0.877	0.868	0.865	0.806	0.809	0.790

TABLE XII.

AMOUNT AND CLASSIFICATION OF CLOUDS AND DIRECTION WHENCE COMING.

DATE.	1 a.			4 a.			7 a.			10 a.		
	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction
1886.												
July 1,	9	cum-nim.	SW	9	nim.	SW	7	c-cum. cum.	SW	5	c-cum. cum.	
" 2,	10	nim.	SW	10	nim.	SW	10	cum-nim.	SW	7	c-cum. cum.	
" 3,	10	cum-nim.	...	10	cum-nim.	SW	10	cum-nim.	SW	6	c-str. cum.	
" 4,	3	cum.	SW	5	cum.	SSW	6	c-str. cum.	NE SSW	7	c-str. cum.	
" 5,	4	cum.	S	6	cum.	S	1	c.	...	5	cum.	
" 6,	2	cum.	ESE	1	cum.	ESE	3	cum.	SE	7	cum.	
" 7,	8	cum.	SE	9	cum-nim.	E	9	cum. cum-nim.	SE ESE	7	cum. c-str. cum.	
" 8,	9	str-cum.	ESE	10	nim.	E	10	nim.	SE	10	nim.	
" 9,	10	cum-nim.	...	10	nim.	SSE	10	str. cum-nim.	S	10	nim.	
" 10,	3	c-str. cum.	...	9	nim.	SSW	10	str. cum-nim.	...	10	cum. cum-nim.	
" 11,	5	cum-str.	SE	9	nim.	SE	9	cum-nim.	SE	9	c-cum. nim.	
" 12,	9	cum. nim.	E	7	nim.	ESE	6	R-cum.	ESE	6	R-cum.	
" 13,	3	cum.	E	8	nim.	E	5	cum.	E	5	c-cum. cum.	
" 14,	2	c. cum-cum.	NE	8	nim.	N	9	sm-cum. cum-nim.	NE N	10	str-cum. cum-nim.	
" 15,	10	nim.	SW	10	nim.	SW	10	nim.	SW	10	nim.	
" 16,	10	nim.	...	10	nim.	...	10	nim.	...	10	nim.	
" 17,	10	nim.	...	10	nim.	...	10	nim.	S	10	nim.	
" 18,	10	nim.	S	10	nim.	SE	10	nim.	SE	10	nim.	
" 19,	9	c-str. sm-cum.	SSE	10	cum-nim.	S	9	R-cum. cum-nim.	SSE ESE	10	cum. cum-nim.	
" 20,	7	cum.	SE	8	cum.	E	6	cum.	ESE	5	cum. cum.	
" 21,	8	c-str. c-cum. cum. c-str. cum.	ENE ESE	3	c-str. cum.	E	5	c-str. c-cum. cum.	NE ENE E	9	c-str. cum.	
" 22,	2	cum.	SE	5	c-str. cum.	SE	5	cum.	SSW	7	c-str. cum.	
" 23,	10	nim.	SW	10	nim.	W	9	cum-nim. cum.	S WSW	10	cum-nim. cum.	
" 24,	9	cum.	SSW	8	nim.	SW	9	cum-nim. cum.	W SW	7	cum. cum.	
" 25,	9	cum.	S	4	cum.	...	7	cum. cum.	NE WSW	7	cum. cum.	
" 26,	10	cum-str.	NE	10	nim.	ENE	9	cum. cum.	ESE	8	cum. cum.	
" 27,	10	cum.	NE	9	cum-nim.	E	10	cum. cum.	E ESE	10	nim.	
" 28,	8	cum.	SW	9	cum.	SSW	5	cum. cum.	SSW	8	c-str. cum.	
" 29,	0	...	...	10	nim.	SW	5	sm-cum. cum.	S SW	3	cum. cum.	
" 30,	2	cum.	SSW	5	cum.	S	7	cum. cum.	SW	9	cum-cum. nim.	
" 31,	6	cum.	SSW	8	cum.	SW	9	cum. cum-nim.	S SW	3	cum-cum. cum.	
Mean,.....	7.0	...	...	8.1	...	...	7.7	...	...	7.7	...	

TABLE XII.—Continued.

AMOUNT AND CLASSIFICATION OF CLOUDS AND DIRECTION WHENCE COMING.

1 p.			4 p.			7 p.			10 p.			Daily and Monthly Means.
Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	
8	c-cum. c-str. cum. c-str.	NE SW NE SW	10	c-str. cum. c-str. cum.	NE SW NE SW	10	cum. c-str. sun-cum. cum-nim.	SW ENE SW	9	cum-nim.	SSW	8.4
8	cum. c-str.	SW NE	10	cum. c-str. cum. c-str.	SW NE SW NE	10	cum. c-str. cum.	NE WSW	9	cum-nim.	SW	9.2
6	cum. c-str.	SW NE	7	cum. c-str. c-str.	SW NNE NE	8	cum.		1	c-str.	...	7.3
5	cum. c-str.	SW NE	7	cum. c-str. c-str.	SSW NE SE	10	c-str.	NNE	1	c-str.	...	5.5
4	cum. c-str.	NE SSE	6	cum. c-str. c-str.	SSE WSW SE	6	c.	NE	1	cum.	SE	4.1
4	cum. c-str.	NE SE	4	cum. c-str.	WSW SE	6	cum.	SE	8	c-cum. cum. c-cum.	ESE	4.4
10	nim.	ESE	10	nim.	ESE	10	str. cum-nim. str.	SE	10	cum-nim.	ESE	9.1
10	nim.	SE	10	str. cum-nim.	SSW	10	str. cum-nim. str.	SSW	10	str. cum-nim.	S	9.9
10	cum. cum-nim.	S SE	10	cum. cum-nim.	SSW SSE	10	cum-nim. str.	SSE	9	cum-nim.	E	9.9
10	cum-nim. c-str.	N E	10	c-str. c-cum. cum-nim.	N ENE E	8	c-str. R-cum. str.	ESE	6	cum.	ESE	8.2
7	cum-nim.	E	10	cum. c-str. cum-nim.	WNW E W	10	cum-nim. c-cum. cum.	ESE	10	cum-nim.	ESE	8.6
7	eum.	ESE	7	cum. c-str. cum-nim.	WNW W E	5	cum. c-cum. cum.	ESE	2	eum.	SE	6.1
6	c-cum. cum.	E	9	cum-nim. c-str.	E	9	cum. str.	NE E	5	c-cum. cum.	E	6.3
10	str-cum. cum-nim.	N	10	str. cum-nim.	NNW	10	str. nim.	W	10	nim.	SW	8.6
10	nim.	WSW	10	nim.	SSW	10	nim.	SW	10	nim.	SW	10.0
10	nim.	SW	10	str. cum-nim.	ESE	10	str-cum.	W	10	str-cum.	W	10.0
10	nim.	S	10	nim.	SSW	10	nim.	S	10	nim.	S	10.0
10	nim.	SSE	10	cum-nim.	SE	10	nim.	SE	9	c-str. cum-nim.	NNW SSE	9.9
9	cum. cum-nim.	SE ESE	6	c-cum. cum.	SE	5	c-cum. cum.	ESE	4	eum.	E	7.7
4	e.	SSE	7	c. c-str. cum.	NNE ESE cum.	3	c. cum. c-str.	ENE ESE	2	c-str. cum.	SE	5.3
10	cum. c-str.	SSE	10	cum. c-cum. cum.	ENE SE NNE	5	cum-str.	...	1	c-str.	...	6.4
9	cum. c-str.	SSW	8	cum. c-str.	cum. SSW	4	cum.	NE SSW	10	nim.	SSW	6.2
10	cum-nim.	W	10	cum-nim.	cum. W	6	cum.	SW	7	cum-nim.	SW	9.0
9	cum-nim.	ENE	10	cum. c-cum. cum.	cum. WSW	10	cum-str.	SSE	2	c-str. cum.	SSE	8.0
8	cum-nim.	WSW	10	str-cum. cum-nim.	WNW NNE	10	cum.	SSE	5	cum-str.	ESE	7.5
7	cum-nim.	S	10	cum-nim.	cum. cum.	10	cum.	E	8	cum-nim.	E	9.0
6	cum-nim.	E	10	cum-nim.	cum. cum.	10	cum-str.	SSW	1	cum.	WSW	7.1
7	cum.	SSW	6	cum. c-str.	cum. cum.	5	cum-str.	SSW	3	cum-nim.	S	5.8
5	cum.	ENE	3	cum. c-str.	cum. cum.	3	cum.	W	2	c-str.	...	5.5
10	cum-nim.	SSW	9	cum. c-str.	cum. cum.	10	cum.	ESE SSW	0	...	...	6.5
3	cum-nim. c-str. cum.	SW	9	cum-nim.	cum. cum.	10	cum.	SW	1	cum.	SW	6.2
7.8	...	...	8.6	...	...	8.2	...	...	5.7	...	...	7.6

TABLE XIII.
RAINFALL AT DIFFERENT STATIONS.

DATE.	OBSERVATORY.		STONE CUTTERS' ISLAND.	VICTORIA P.
	Amount.	Duration.	Amount.	Amount.
1886. July 1,.....	ins.	hrs.	ins.	ins.
	0.295	6	2.51	0.27
	0.270	3	0.40	...

	0.070	2	0.05	...
	1.825	16	1.28	1.66
	0.820	10	0.95	1.25
	0.160	5	0.16	0.48
	0.785	4	0.72	0.33
	0.620	7	0.53	0.64
	0.080	3	0.14	0.21
	0.035	2	0.03	...
	2.995	17	3.95	4.10
	13.355	24	10.70	14.56
	1.535	14	1.81	2.39
	1.730	18	1.21	1.31
	0.960	6	1.02	0.78
	0.210	2	0.45	...

	0.020	1	0.01	...
	0.740	5	0.78	0.58
	0.185	2	...	...

	0.555	4	0.57	0.52
	0.765	7	0.54	1.66
	0.095	1	0.31	...
	0.030	1	0.10	...
	...	...	0.05	...
	0.110	2	0.35	0.16
	0.125	1	...	0.12
Total,.....	28.320	163	28.62	31.02

W. DOBERCK,
Government Astronomer

Hongkong Observatory, 7th August, 1886.

HONGKONG OBSERVATORY.

Weather Report for August, 1886.

the *China Coast Meteorological Register*, based on information transmitted by the Great Northern Eastern Extension Telegraph Companies, which was daily published, is given a summary of the meteoric circumstances in Luzon and along the Coast of China, and information concerning the appearance in Nagasaki and Wladivostock. It contains also information concerning the first appearance of typhoons.

usual visibility was noticed on the 7th, the 8th, the 13th, the 23rd, the 24th, the 28th and the

was hazy on the mornings of the 6th, the 7th, the 19th, the 20th and the 31st.

Clouds fell on the evenings of the 18th, the 19th, the 20th, the 22nd, the 27th and the 29th.

A lunar corona was seen during this month.

Marine halos were seen on the 5th, the 10th, the 11th and the 14th.

Mar coronas were seen on the 2nd, the 3rd, the 6th, the 9th, the 12th, the 22nd, the 29th and the

Marine halos were seen on the 1st, the 5th, the 9th, the 12th, the 21st, the 23rd and the 27th.

Marine rainbows were seen on the afternoons of the 3rd, the 19th, the 24th and the 25th.

Lightning was seen on the evening of the 1st and during the following night. Thunder and lightning occurred during the night between the 3rd and the 4th. Lightning was seen during the night of the 7th and the 8th. Thunder was heard the following day.

Thunder and lightning occurred on the 9th and a light thunderstorm passed from E to N in the afternoon. It was nearest (14^s) at 11^h 59^m p. Thunder was heard till 10 a. the following morning. Thunder was heard on the 11th, the 12th, the 14th, the 15th and the 18th and lightning was seen on the 14th, the 15th and the 18th.

Between 4 p. and 5 p. on the 19th a heavy thunderstorm passed from W to E to the north of the Observatory. It was nearest (20^s) at 4^h 17^m p. The bright sunshine was uninterrupted here but heavy rain was observed in the NE.

Lightning was seen on the 20th, the 21st, the 22nd, the 23rd, the 24th, the 26th, the 27th, the 28th and the 29th and thunder was heard on the 30th.

A moderate thunderstorm passed from NNE towards SSW between 12^h 45^m p. and 1^h 30^m p. on the 31st. The lightning was not seen but the storm was very near at 1 p.

The total distance traversed by, as well as the duration and average velocity of winds from the eight quarters were as follows:—

<i>Direction.</i>	<i>Total Distance.</i> Miles.	<i>Duration.</i> Hours.	<i>Velocity.</i> Miles per hour.
N	11	1	11.0
NE	142	19	7.5
E	2189	178	12.3
SE	277	40	6.9
S	495	57	8.7
SW	2800	220	12.7
W	873	114	7.7
NW	83	19	4.4
Calm	46	96	0.5

TABLE I.

BAROMETRIC PRESSURE FOR THE MONTH OF AUGUST, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.
Aug. 1, ...	29.640	29.626	29.607	29.593	29.595	29.607	29.613	29.624	29.632	29.626	29.615	29.610	29.602	29.591	29.564	29.550	29.554	29.548	29.576	29.608	29.624	29.636	29.652	29.640	29.606
" 2, ...	.629	.618	.602	.599	.602	.610	.627	.641	.645	.656	.662	.662	.654	.638	.623	.596	.597	.610	.633	.667	.671	.685	.698	.690	.638
" 3, ...	.682	.685	.689	.693	.704	.716	.724	.735	.742	.740	.735	.730	.714	.705	.684	.664	.652	.674	.687	.692	.703	.719	.729	.722	.705
" 4, ...	.703	.695	.689	.689	.694	.697	.710	.729	.735	.735	.739	.712	.701	.680	.673	.672	.664	.662	.680	.692	.698	.697	.694	.691	.697
" 5, ...	.684	.672	.670	.673	.681	.696	.711	.726	.733	.746	.738	.721	.704	.680	.685	.686	.680	.696	.710	.739	.750	.757	.762	.758	.711
" 6, ...	.741	.736	.730	.726	.730	.747	.763	.774	.788	.798	.791	.787	.779	.763	.757	.743	.725	.724	.725	.760	.783	.793	.785	.780	.759
" 7, ...	.763	.746	.745	.739	.745	.755	.769	.781	.786	.792	.781	.754	.741	.723	.707	.696	.686	.689	.690	.696	.715	.715	.707	.703	.734
" 8, ...	.678	.664	.662	.667	.667	.684	.702	.712	.717	.726	.722	.690	.668	.666	.638	.650	.652	.627	.653	.640	.672	.690	.682	.673	.675
" 9, ...	.652	.635	.616	.616	.633	.652	.656	.674	.676	.664	.655	.640	.628	.601	.587	.576	.571	.583	.597	.636	.656	.669	.696	.683	.635
" 10, ...	.641	.614	.586	.588	.607	.628	.646	.652	.666	.670	.667	.647	.623	.614	.596	.574	.580	.590	.603	.620	.630	.653	.658	.647	.625
" 11, ...	.628	.618	.612	.599	.605	.606	.619	.635	.636	.636	.637	.622	.617	.578	.566	.549	.553	.554	.582	.587	.595	.603	.614	.612	.603
" 12, ...	.588	.578	.569	.565	.567	.577	.581	.590	.604	.600	.603	.590	.578	.567	.536	.522	.523	.528	.529	.542	.567	.576	.561	.547	.566
" 13, ...	.530	.523	.499	.500	.511	.508	.520	.531	.536	.534	.525	.509	.491	.470	.451	.435	.435	.435	.457	.484	.494	.505	.510	.509	.496
" 14, ...	.493	.470	.457	.456	.459	.462	.467	.472	.475	.465	.451	.442	.426	.427	.416	.403	.421	.420	.416	.440	.452	.472	.473	.465	.450
" 15, ...	.464	.456	.447	.445	.443	.447	.454	.457	.478	.491	.489	.484	.480	.450	.457	.440	.431	.459	.457	.487	.512	.527	.540	.539	.472
" 16, ...	.533	.522	.520	.520	.522	.528	.546	.570	.583	.595	.580	.572	.562	.554	.555	.548	.554	.554	.566	.590	.615	.631	.632	.617	.565
" 17, ...	.609	.606	.588	.586	.591	.598	.615	.620	.627	.639	.642	.634	.607	.588	.579	.568	.564	.588	.615	.622	.638	.642	.626	.597	.608
" 18, ...	.587	.574	.574	.569	.567	.566	.581	.587	.596	.592	.584	.570	.548	.525	.521	.510	.519	.517	.517	.541	.562	.578	.579	.570	.560
" 19, ...	.552	.545	.531	.534	.550	.567	.582	.585	.585	.580	.559	.553	.535	.515	.502	.498	.511	.508	.515	.534	.548	.560	.556	.555	.544
" 20, ...	.551	.520	.516	.529	.541	.554	.568	.572	.589	.595	.596	.594	.575	.564	.554	.556	.557	.570	.585	.598	.608	.620	.630	.640	.574
" 21, ...	.636	.623	.611	.614	.617	.624	.634	.653	.663	.657	.652	.647	.628	.619	.608	.600	.602	.618	.640	.654	.660	.664	.652	.640	.634
" 22, ...	.637	.632	.628	.628	.639	.648	.671	.692	.696	.697	.695	.684	.662	.640	.621	.608	.611	.611	.625	.657	.681	.677	.657	.651	.652
" 23, ...	.651	.641	.641	.637	.643	.646	.662	.669	.676	.675	.677	.666	.660	.635	.619	.606	.610	.617	.636	.664	.682	.694	.681	.672	.653
" 24, ...	.651	.640	.638	.636	.640	.644	.653	.671	.686	.687	.686	.662	.647	.626	.619	.594	.595	.594	.605	.629	.649	.669	.656	.634	.642
" 25, ...	.629	.615	.608	.602	.606	.628	.634	.642	.651	.655	.647	.645	.619	.609	.605	.579	.586	.600	.613	.639	.662	.665	.667	.656	.628
" 26, ...	.638	.630	.626	.630	.626	.647	.661	.683	.695	.718	.711	.696	.682	.671	.653	.638	.633	.631	.645	.668	.707	.726	.714	.722	.669
" 27, ...	.714	.707	.696	.696	.711	.727	.756	.768	.780	.793	.787	.776	.761	.747	.739	.731	.734	.735	.754	.776	.799	.815	.814	.805	.755
" 28, ...	.792	.764	.766	.762	.769	.773	.779	.795	.807	.804	.793	.775	.772	.750	.723	.721	.709	.721	.745	.786	.791	.786	.784	.764	.768
" 29, ...	.742	.730	.709	.718	.727	.741	.759	.767	.776	.774	.769	.751	.727	.722	.705	.699	.701	.715	.731	.754	.761	.772	.763	.741	
" 30, ...	.754	.748	.747	.737	.738	.748	.757	.763	.780	.791	.801	.786	.762	.754	.732	.737	.743	.739	.754	.774	.783	.792	.784	.782	.762
" 31, ...	.782	.767	.767	.759	.757	.762	.773	.788	.797	.792	.791	.785	.768	.740	.730	.723	.722	.732	.738	.754	.756	.764	.763	.757	.761
Hourly Means, }	29.644	29.632	29.624	29.623	29.629	29.638	29.651	29.663	29.672	29.675	29.670	29.659	29.643	29.626	29.614	29.603	29.602	29.608	29.621	29.642	29.659	29.669	29.669	29.661	29.642

TEMPERATURE FOR THE MONTH OF AUGUST, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means	Max.	Min.
Aug. 1,.....	82.4	81.6	81.6	81.5	81.2	79.7	79.0	79.4	82.1	84.3	80.9	80.5	82.2	82.7	82.9	84.0	83.0	83.0	82.5	82.4	81.7	81.4	81.7	82.1	81.8	84.3	77.7
" 2,.....	82.1	81.6	82.2	81.7	80.6	81.3	81.9	82.0	84.0	84.9	84.8	85.3	85.4	85.7	86.1	85.1	83.9	83.2	82.4	82.3	82.2	82.1	82.1	81.9	83.1	87.2	80.5
" 3,.....	81.8	81.5	81.4	80.1	80.6	81.6	82.0	82.9	83.9	85.0	82.6	83.3	85.0	85.5	85.6	85.6	84.7	83.4	82.5	82.0	82.3	82.6	82.8	82.5	83.0	86.7	80.0
" 4,.....	81.9	81.7	81.8	81.7	81.3	81.4	82.2	82.9	82.7	83.7	83.6	84.6	84.5	85.3	84.8	84.0	83.6	83.0	82.7	82.1	81.9	81.6	81.7	81.9	82.8	86.7	81.3
" 5,.....	82.0	81.5	81.8	81.6	81.6	81.7	81.9	83.5	84.0	84.0	86.1	84.9	85.6	85.5	86.6	84.3	84.1	83.5	82.9	82.3	81.6	81.1	81.1	81.0	83.1	86.6	81.0
" 6,.....	80.8	80.4	80.2	80.1	79.7	79.8	81.1	82.0	83.9	84.0	85.4	85.8	86.0	86.1	86.2	86.3	85.4	83.6	82.1	81.6	81.8	81.2	80.9	80.6	82.7	86.9	79.7
" 7,.....	79.9	79.8	79.7	79.4	79.4	79.8	81.0	81.9	83.1	84.4	85.1	85.9	86.9	87.2	86.9	87.1	86.4	84.4	82.9	82.2	82.5	82.2	82.0	81.9	83.0	88.1	79.3
" 8,.....	81.8	81.7	81.3	80.9	80.6	80.7	81.6	82.7	83.7	85.8	84.9	85.4	87.8	87.0	86.0	85.1	84.2	83.9	83.5	83.0	82.6	82.1	82.2	82.0	83.4	87.8	80.5
" 9,.....	82.1	81.9	82.0	81.5	81.3	81.1	82.1	83.0	83.9	85.0	86.3	87.1	87.3	89.0	88.9	88.2	85.0	84.0	83.5	83.1	82.8	82.7	79.4	75.7	83.6	89.0	75.2
" 10,.....	77.1	77.5	77.8	77.6	78.1	78.5	79.9	81.7	82.8	85.1	85.8	83.0	84.3	86.0	87.2	85.6	84.9	82.4	81.6	81.7	81.8	82.1	81.7	81.5	81.9	87.2	75.2
" 11,.....	81.0	80.9	81.8	81.6	81.4	81.5	82.9	83.0	84.5	86.0	80.1	82.4	82.2	81.9	82.7	82.3	81.5	81.4	79.6	79.3	79.0	78.5	78.5	79.1	81.4	86.6	78.1
" 12,.....	79.0	79.0	78.6	79.1	78.6	78.7	80.0	81.1	82.8	83.1	85.0	84.5	81.3	80.2	80.0	81.3	80.9	79.2	79.2	78.9	78.3	78.1	77.8	77.3	80.1	85.4	77.1
" 13,.....	77.2	77.3	77.5	77.2	77.6	77.9	79.0	80.3	81.7	82.8	82.9	85.0	85.4	85.7	86.3	86.1	84.5	82.8	81.3	81.5	81.2	81.1	81.4	80.7	81.4	86.6	77.1
" 14,.....	80.1	79.8	79.7	79.3	79.2	78.6	79.3	81.5	82.5	84.7	84.8	85.8	88.2	87.3	87.5	86.9	83.8	82.1	83.0	81.4	80.4	80.6	80.4	80.8	82.4	88.2	78.6
" 15,.....	81.3	81.5	81.3	80.6	80.9	81.4	82.1	82.1	82.6	82.6	85.1	83.8	82.9	84.5	83.7	82.9	82.3	80.1	80.5	79.7	80.7	81.2	81.6	81.9	82.0	85.8	79.7
" 16,.....	82.3	82.4	81.7	81.9	80.5	81.3	81.4	80.9	81.9	82.4	83.1	83.5	83.0	82.1	82.0	81.9	81.2	81.3	81.3	81.4	81.3	81.6	81.5	81.8	83.5	78.7	
" 17,.....	81.3	81.0	81.0	80.1	80.6	80.6	81.1	82.7	83.5	83.9	83.4	85.1	85.2	84.5	84.1	82.8	82.3	81.2	76.3	77.0	76.7	76.6	76.5	76.7	81.0	85.3	76.0
" 18,.....	76.9	77.3	77.7	77.9	78.3	78.4	78.0	80.2	82.9	83.1	84.2	84.6	87.1	87.3	86.3	86.8	83.5	82.7	81.8	81.5	80.7	80.7	80.2	79.9	81.6	87.3	76.6
" 19,.....	79.8	79.1	79.2	78.7	78.3	78.5	79.9	81.0	82.6	84.0	84.5	85.7	86.2	87.9	88.9	88.5	86.4	84.1	82.8	81.4	80.9	80.0	79.7	79.8	82.4	89.7	78.2
" 20,.....	79.6	78.9	78.7	78.8	78.5	79.0	80.2	82.3	84.4	85.9	86.2	84.1	83.0	83.3	82.8	82.3	81.2	80.2	80.0	79.6	79.3	79.1	78.3	78.6	81.0	86.2	78.3
" 21,.....	78.4	78.4	78.2	78.2	78.3	78.3	79.1	80.3	81.5	83.4	82.6	81.7	83.1	84.1	83.2	81.2	82.3	81.0	79.1	79.1	78.5	78.7	78.1	77.8	80.2	84.8	77.8
" 22,.....	77.8	77.3	77.2	77.1	77.5	77.5	77.5	79.2	80.0	82.9	82.8	82.1	81.4	82.7	82.2	81.9	80.6	79.6	79.1	78.8	78.6	79.1	78.6	79.6	82.9	76.7	
" 23,.....	79.0	79.0	78.8	78.6	78.8	78.4	80.1	81.2	83.8	84.0	83.7	83.9	83.0	83.4	83.2	82.7	81.7	80.8	80.2	80.2	80.1	80.7	80.2	79.4	81.0	84.0	78.4
" 24,.....	79.3	79.2	79.0	78.0	78.5	78.4	78.7	80.9	82.1	79.9	81.5	82.8	82.2	83.0	79.9	81.9	78.8	79.0	79.0	79.4	79.5	79.5	78.2	79.9	83.1	78.0	
" 25,.....	78.7	78.3	78.4	77.6	77.6	75.8	76.0	77.0	77.8	79.1	81.6	77.1	80.4	80.9	78.3	80.1	77.7	77.8	77.9	76.6	76.6	77.1	76.1	76.7	78.0	81.6	75.5
" 26,.....	77.3	76.4	76.4	76.3	76.4	75.9	75.9	75.2	74.7	75.4	74.9	75.6	76.2	74.8	75.1	75.4	76.2	76.3	76.2	76.5	77.2	76.2	76.2	76.6	76.0	77.3	74.7
" 27,.....	76.7	76.6	76.8	76.8	76.8	76.9	76.5	75.8	76.8	77.9	79.2	80.4	81.0	82.0	80.8	82.3	83.0	80.3	80.0	79.1	78.5	78.7	78.5	78.3	78.8	83.9	75.8
" 28,.....	78.8	79.1	78.0	77.9	77.4	77.2	78.9	80.0	82.9	83.9	83.8	83.5	84.5	85.1	85.1	83.7	83.5	81.5	80.9	80.3	77.6	78.1	78.6	79.1	80.8	85.3	77.1
" 29,.....	79.1	79.6	79.8	80.0	80.0	81.1	82.5	82.1	82.7	83.1	82.7	82.2	83.1	83.0	82.3	82.2	81.0	80.5	80.5	79.6	79.6	79.5	79.6	79.0	81.1	83.4	78.9
" 30,.....	78.0	78.2	78.5	78.8	79.1	79.4	80.8	81.9	82.6	82.9	83.7	84.0	83.1	83.3	83.2	82.2	81.2	80.4	79.5	79.3	78.9	78.8	78.9	80.7	84.5	78.0	
" 31,.....	79.0	79.0	78.6	78.3	78.2	78.3	79.1	80.9	82.1	82.9	84.0	81.9	76.1	77.4	79.4	79.1	78.5	78.2	78.0	78.0	78.0	77.5	77.4	79.1	84.4	76.1	
Hourly Means,.....	79.8	79.6	79.6	79.3	79.3	80.0	81.0	82.2	83.1	83.5	83.5	83.6	83.9	83.9	83.6	82.5	81.5	80.7	80.4	80.1	80.0	79.8	79.6	81.2	85.5	77.9	

TABLE III.

TEMPERATURE OF EVAPORATION AND RADIATION, FOR THE MONTH OF AUGUST, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.	Sun.	Rad.
Aug. 1,.....	78.0	78.0	77.3	77.3	77.6	75.5	76.5	77.3	77.9	78.6	76.7	78.5	78.4	78.8	77.5	78.4	77.9	77.6	77.7	77.8	77.7	77.6	77.8	77.7	156.8	76.2	
" 2,.....	78.0	77.5	78.0	77.9	76.5	78.5	78.8	78.9	79.1	79.5	79.5	79.3	79.2	79.7	79.5	78.5	78.4	78.4	77.4	77.2	77.8	77.7	77.6	77.7	78.4	147.3	76.3
" 3,.....	77.3	77.7	78.0	76.8	77.7	78.3	78.6	79.6	79.1	78.2	77.8	79.2	79.4	79.6	79.1	78.2	78.3	78.3	77.9	77.7	78.0	78.0	78.2	77.7	78.3	149.4	79.4
" 4,.....	77.7	77.6	77.3	77.1	77.3	77.4	77.8	78.5	78.2	78.4	77.4	77.9	77.4	78.1	77.6	78.0	77.8	77.6	77.7	77.8	77.3	77.4	77.4	77.9	77.7	151.0	79.0
" 5,.....	77.5	78.1	76.6	77.1	76.8	76.6	76.5	77.4	77.1	77.3	77.6	77.4	77.4	77.8	77.0	77.4	77.3	77.5	77.5	76.6	77.0	77.0	76.9	77.1	77.2	156.7	77.7
" 6,.....	76.6	77.6	76.7	76.9	77.5	77.6	78.3	77.6	78.5	78.0	78.7	78.6	78.1	78.6	78.5	78.1	77.3	77.3	77.2	77.7	77.8	77.2	77.2	77.7	156.6	75.2	
" 7,.....	77.9	77.6	77.3	76.9	76.2	75.9	77.2	76.7	77.6	77.9	77.5	77.6	79.4	78.7	78.9	79.4	79.3	77.5	77.7	77.4	78.1	77.9	77.6	77.9	77.8	144.2	74.9
" 8,.....	77.7	77.4	77.5	77.5	77.3	77.6	77.8	78.4	78.3	77.8	77.7	79.5	79.6	79.8	79.1	79.4	78.6	78.5	78.5	78.9	79.1	78.7	78.8	78.7	148.4	79.5	
" 9,.....	78.6	78.4	78.2	78.0	77.4	78.1	77.6	77.8	78.0	78.6	79.2	79.0	79.2	78.8	80.2	79.3	78.6	78.8	78.3	78.8	79.2	78.6	72.3	78.2	146.3	78.3	
" 10,.....	73.2	72.8	73.2	73.7	73.1	74.4	75.1	76.0	76.9	77.4	77.1	77.6	78.0	78.6	77.6	77.3	78.0	77.9	77.8	77.9	78.5	78.2	78.8	79.0	76.6	149.8	78.8
" 11,.....	78.4	78.3	77.8	77.5	77.9	77.9	78.6	78.7	79.5	76.2	77.1	78.5	76.5	76.5	78.1	77.1	76.0	75.5	73.6	75.1	75.1	75.3	75.5	75.6	76.9	149.3	76.3
" 12,.....	75.1	74.8	75.5	75.2	75.7	75.7	76.4	75.7	75.5	75.4	75.1	78.7	76.7	75.9	74.6	74.3	74.6	75.2	74.7	75.0	75.5	75.6	75.0	74.7	75.4	149.8	76.2
" 13,.....	75.1	75.0	74.6	75.2	75.1	76.1	75.9	76.4	77.1	76.9	76.7	77.3	77.5	77.6	76.9	78.5	78.1	77.6	76.6	76.5	76.8	76.6	75.6	76.4	76.5	140.0	75.9
" 14,.....	76.8	76.2	76.2	76.5	76.5	76.3	76.8	76.7	77.1	77.5	77.5	77.7	78.6	79.4	79.5	79.3	79.3	78.1	77.7	75.7	77.2	77.0	77.2	76.8	77.0	142.1	76.3
" 15,.....	76.3	76.9	76.7	77.0	76.9	77.2	77.7	77.4	77.8	78.5	79.8	79.4	78.9	79.6	*79.0	78.5	76.9	76.9	76.6	76.8	76.5	76.7	76.8	77.4	77.6	140.0	77.7
" 16,.....	*77.6	*77.6	*77.3	*77.3	*77.0	*77.4	77.4	77.6	77.7	77.8	77.9	78.3	78.8	78.5	78.2	78.4	77.7	77.8	77.5	77.4	77.8	77.7	77.8	77.8	127.2	76.0	
" 17,.....	78.1	78.4	78.1	78.3	77.7	77.5	77.7	78.5	77.8	77.9	77.7	77.5	78.2	79.1	78.4	78.2	78.1	77.5	73.2	74.2	73.6	74.5	74.1	74.4	77.0	140.3	79.6
" 18,.....	74.7	75.2	75.3	75.6	76.1	76.4	75.9	77.0	78.0	78.4	78.3	78.4	79.3	78.7	79.6	80.1	78.9	78.8	78.5	78.7	78.4	78.4	77.7	77.5	77.7	152.6	77.3
" 19,.....	77.6	77.1	77.3	76.9	76.7	76.9	78.0	77.9	77.8	78.6	77.9	78.7	78.6	78.3	79.5	78.9	77.7	77.8	76.5	77.4	77.3	77.7	77.4	77.6	77.8	145.2	77.3
" 20,.....	77.6	77.1	76.8	76.8	76.4	77.0	77.8	78.4	78.6	78.4	78.9	76.5	78.2	78.8	77.9	78.2	77.7	78.1	78.4	78.4	77.7	77.6	77.2	77.7	152.4	75.5	
" 21,.....	77.0	76.8	76.7	76.6	76.5	76.7	76.9	77.5	77.6	78.3	77.6	77.2	77.9	78.1	77.2	76.2	76.3	76.6	76.1	76.0	75.8	76.2	75.6	75.5	76.8	148.8	76.1
" 22,.....	75.7	75.5	75.6	75.6	75.9	74.8	74.9	76.2	73.7	74.8	75.1	76.0	77.1	76.4	76.9	76.6	76.4	76.5	76.6	76.6	76.6	76.6	76.6	76.6	76.6	153.4	74.0
" 23,.....	76.6	76.2	76.4	76.3	75.8	75.8	75.8	76.7	76.8	78.2	77.7	77.7	77.5	77.6	77.3	77.2	77.1	77.1	77.4	77.0	77.0	76.0	76.0	76.0	147.9	74.6	
" 24,.....	76.2	76.2	76.2	75.9	75.4	75.7	76.1	76.6	76.5	77.1	78.3	76.5	76.4	77.3	76.7	75.5	76.3	76.3	76.4	76.1	76.4	76.1	75.9	76.4	145.4	74.7	
" 25,.....	75.6	75.6	75.8	74.8	74.2	74.3	74.1	74.5	75.3	76.5	77.0	75.6	76.4	76.7	74.9	75.3	75.3	75.1	75.6	75.5	75.3	75.1	75.6	75.5	146.1	74.3	
" 26,.....	75.6	74.9	75.0	75.3	75.2	74.9	74.3	74.2	74.5	74.4	73.7	74.4	74.3	74.5	74.5	74.8	74.5	74.5	74.8	74.9	75.4	74.6	74.6	75.0	74.7	88.6	73.3
" 27,.....	74.9	74.9	75.0	75.0	75.2	75.1	75.0	74.9	75.5	76.7	77.6	78.4	78.5	75.8	76.1	77.6	77.8	77.5	77.4	77.2	76.9	76.9	76.4	76.2	76.4	136.7	74.2
" 28,.....	76.6	76.5	75.8	75.2	75.2	75.0	76.2	76.5	77.3	76.5	76.5	76.2	76.4	77.1	74.7	76.5	75.0	74.3	73.9	75.1	74.6	74.5	75.0	75.6	75.7	142.6	74.0
" 29,.....	76.3	75.7	76.4	76.6	76.6	76.9	77.5	77.8	77.1	76.8	77.8	77.4	76.7	77.6	77.6	78.1	77.3	76.8	76.9	76.9	76.8	76.7	76.6	77.0	145.0	75.7	
" 30,.....	76.6	76.9	76.9	76.4	76.8	76.7	77.4	77.5	77.2	76.6	78.4	78.2	77.2	76.7	77.1	77.5	76.9	76.9	76.1	76.2	76.8	76.6	76.3	76.7	76.9	152.5	75.7
" 31,.....	77.0	77.0	76.8	76.5	76.8	76.6	77.2	78.0	76.8	75.7	76.4	76.9	74.5	74.9	75.7	76.6	74.9	75.9	75.8	75.7	75.9	75.7	75.6	75.7	76.2	145.5	74.7
Hourly Means,	76.7	76.6	76.5	76.4	76.4	76.5	76.9	77.2	77.4	77.4	77.5	77.9	77.8	77.8	77.6	77.8	77.8	77.2	77.1	76.6	76.8	76.9	76.8	76.5	77.0	145.4	76.3

TABLE IV.

AN HOURLY AND DAILY RELATIVE HUMIDITY AND TENSION OF AQUEOUS VAPOUR
FOR THE MONTH OF AUGUST, 1886.

DUR.	HOURLY MEAN.		DATE.	DAILY MEAN.	
	Humidity.	Tension.		Humidity.	Tension.
			1886.		
a	87	0.878	Aug. 1,.....	83	0.895
"	87	0.877	" 2,.....	80	0.910
"	87	0.872	" 3,.....	80	0.906
"	87	0.871	" 4,.....	79	0.882
"	87	0.871	" 5,.....	75	0.856
"	88	0.876	" 6,.....	79	0.884
"	87	0.885	" 7,.....	78	0.884
"	84	0.884	" 8,.....	79	0.906
"	80	0.877	" 9,.....	77	0.894
"	76	0.864	" 10,.....	78	0.846
"	75	0.863	" 11,.....	81	0.865
on.	77	0.881	" 12,.....	79	0.818
P	76	0.876	" 13,.....	78	0.847
"	75	0.871	" 14,.....	79	0.874
"	74	0.861	" 15,.....	81	0.888
"	76	0.876	" 16,.....	83	0.900
"	78	0.864	" 17,.....	83	0.875
"	81	0.873	" 18,.....	83	0.898
"	83	0.862	" 19,.....	81	0.892
"	85	0.875	" 20,.....	86	0.906
"	86	0.883	" 21,.....	85	0.878
"	86	0.880	" 22,.....	85	0.851
"	86	0.870	" 23,.....	83	0.875
adt.	87	0.877	" 24,.....	85	0.864
			" 25,.....	89	0.850
			" 26,.....	94	0.843
			" 27,.....	89	0.878
			" 28,.....	78	0.821
			" 29,.....	83	0.874
			" 30,.....	84	0.875
			" 31,.....	87	0.865
mean,	82	0.874	Mean,.....	82	0.874

TABLE V.
DURATION OF SUNSHINE.

TABLE VI.
RAINFALL FOR THE MONTH OF AUGUST, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Sums.
Aug. 1,	0·015	...	0·110	...	...	...	0·150	0·010	...	...	...	...	...	...	...	...	0·010	...	...	0·295	
" 2,	0·005	...	...	0·005	...	...	...	...	...	...	0·015	0·065	...	...	...	...	...	...	...	...	...	...	...	0·010
" 3,	0·080	
" 4,	0·010	
" 5,	
" 6,	
" 7,	
" 8,	
" 9,	0·320	
" 10,	0·010	0·020	...	...	...	...	...	...	...	...	...	0·160	0·080	...	...	...	...	...	...	...	...	...	...	0·320
" 11,	0·030	
" 12,	0·240	
" 13,	
" 14,	
" 15,	
" 16,	0·250	0·050	...	...	0·300	0·055	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·660	
" 17,	0·015	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·005	
" 18,	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·020	
" 19,	0·005	
" 20,	
" 21,	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·005	
" 22,	0·035	
" 23,	
" 24,	0·030	...	...	...	...	...	...	...	...	...	0·005	0·050	...	...	0·075	0·070	0·230	
" 25,	0·050	0·005	0·345	0·290	...	0·080	...	0·040	0·400	0·055	...	0·035	0·040	...	...	0·075	...	0·045	0·160	0·390	...	2·010	
" 26,	0·010	0·340	...	0·015	0·020	0·265	0·150	0·255	0·445	1·240	0·225	0·395	0·330	0·090	0·020	...	...	...	0·325	0·100	0·005	...	4·230	
" 27,	0·020	0·135	...	...	...	...	...	0·020	0·100	...	...	...	...	...	...	...	...	...	0·275	
" 28,	0·005	...	...	...	...	...	0·005	
" 29,	
" 30,	0·595	...	...	...	...	0·020	...	...	...	...	...	...	...
" 31,	0·615	
Sums,.....	0·025	0·360	0·050	0·275	0·430	0·600	0·400	0·635	0·530	1·285	0·950	0·605	0·945	0·225	0·060	0·020	0·015	0·125	0·335	0·155	0·240	0·815	9·080

TABLE VII.

DIRECTION AND VELOCITY OF THE WIND FOR THE MONTH OF AUGUST, 1886.

DATE.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Sums.	Means.																							
	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.																															
Aug. 1.....	18	13	18	15	20	15	19	22	19	21	19	16	20	10	23	9	20	19	18	24	20	23	12	20	19	20	15	18	14	18	15	19	18	19	13	367	15.3												
" 2.....	19	14	19	15	18	16	19	16	21	9	22	13	22	10	22	10	21	15	20	19	21	19	17	19	22	20	19	17	19	16	18	8	19	6	19	7	19	7	323	13.5									
" 3.....	20	12	19	14	19	12	23	9	23	6	23	8	23	7	23	8	21	8	22	13	20	14	20	17	19	19	15	18	13	19	12	18	12	268	11.2														
" 4.....	20	15	19	14	19	13	19	16	20	16	20	19	19	16	21	12	20	13	19	16	19	11	19	14	19	19	20	17	19	17	19	14	19	11	18	7	18	9	351	14.6									
" 5.....	19	9	20	9	19	12	21	9	20	13	19	11	19	14	19	11	20	8	20	7	17	10	16	13	17	12	17	13	21	11	18	12	16	8	18	3	0	205	8.5										
" 6.....	1	...	1	...	0	...	0	...	1	17	2	...	0	...	1	27	4	27	5	23	5	17	7	20	7	15	11	15	8	22	10	19	6	18	6	21	4	18	4	0	0	1	84	3.5					
" 7.....	22	5	25	5	25	4	...	1	...	0	26	2	...	0	26	2	26	6	26	8	25	12	23	9	25	10	23	12	22	13	20	10	19	11	18	6	20	16	19	11	20	3	180	7.5					
" 8.....	21	8	21	9	21	11	24	6	24	4	24	2	24	6	24	0	23	7	25	6	26	8	24	6	18	9	16	11	16	6	...	1	17	3	21	5	15	2	...	0	1	18	3	124	5.2				
" 9.....	21	7	22	11	21	14	22	10	22	9	22	5	22	6	23	8	23	4	24	9	23	2	23	10	18	15	20	18	19	17	19	11	19	5	20	7	8	10	4	22	9	5	241	10.0					
" 10.....	12	4	18	5	25	4	25	4	26	5	19	2	12	7	11	5	11	4	14	3	23	8	18	9	16	2	24	5	24	7	18	10	18	8	17	8	17	4	20	5	20	2	20	7	23	2	1	121	5.0
" 11.....	24	3	26	4	22	12	21	9	22	5	23	4	24	3	24	4	24	6	23	10	21	15	19	15	21	20	21	19	22	8	22	7	23	6	20	8	19	2	19	3	16	2	0	0	170	7.1			
" 12.....	0	...	0	...	0	18	4	21	3	...	1	...	1	...	1	24	4	16	5	8	7	16	17	21	17	26	4	26	2	16	5	16	7	23	4	21	2	...	0	1	29	4	92	3.8					
" 13.....	1	...	1	29	2	29	5	...	1	1	28	4	26	7	25	12	25	14	23	13	23	14	23	17	23	13	20	13	20	12	20	10	20	6	19	3	5	3	21	13	22	16	209	8.7					
" 14.....	22	12	22	12	22	13	21	14	22	10	23	9	23	4	24	7	24	7	23	13	23	12	23	13	22	13	20	13	19	12	19	9	20	8	20	8	22	4	17	6	20	8	23	7	239	10.0			
" 15.....	21	11	20	8	18	9	21	9	20	11	19	13	20	12	20	9	19	7	18	10	18	11	19	18	21	16	19	19	21	18	17	19	16	23	10	19	18	14	348	14.5									
" 16.....	18	21	19	28	19	28	18	25	19	24	18	26	19	23	19	23	19	21	18	23	19	19	22	17	21	18	21	17	19	20	18	19	17	19	17	19	19	20	19	472	19.7								
" 17.....	21	16	21	16	22	16	22	15	22	13	22	14	22	11	21	13	21	15	22	12	21	16	18	16	21	14	19	17	21	12	20	13	19	14	19	17	19	17	280	11.7									
" 18.....	27	3	...	0	...	0	...	0	...	0	22	6	25	4	25	3	25	4	24	6	23	11	23	9	23	7	18	10	22	10	21	9	22	5	...	1	...	1	0	...	1	...	1	100	4.2				
" 19.....	25	3	...	0	...	0	...	0	...	0	24	3	...	1	...	0	24	3	24	4	24	6	24	9	23	24	10	24	7	23	5	22	3	17	6	13	2	...	1	...	1	27	3	83	3.5				
" 20.....	0	...	1	...	0	...	0	...	0	...	0	...	0	...	0	...	1	26	2	14	7	10	11	4	8	7	11	8	19	1	8	20	8	21	8	19	9	10	8	5	8	7	175	7.3					
" 21.....	8	7	8	9	8	9	9	10	9	10	9	8	9	9	11	8	11	8	15	7	16	9	15	9	10	8	13	8	8	6	14	6	11	5	10	5	10	5	10	6	10	8	211	8.8					
" 22.....	10	3	10	2	10	3	...	1	11	3	14	6	14	2	14	3	5	5	8	3	8	3	8	6	8	12	9	14	8	18	1	20	3	18	9	7	6	9	9	7	9	11	3	171	7.1				
" 23.....	10	3	3	9	3	9	1	0	...	0	...	0	...	0	...	0	9	4	8	13	8	13	8	19	9	19	10	19	9	23	8	21	8	20	9	15	9	14	10	13	8	13	4	253	10.5				
" 24.....	10	7	8	5	7	4	7	2	1	...	0	...	1	8	5	7	12	8	18	9	16	8	15	7	15	8	18	10	22	9	19	9	23	9	16	8	20	8	16	9	18	10	14	10	13	9	16	296	12.3
" 25.....	12	11	11	6	10	8	6	7	9	5	4	8	5	8	16	5	5	6	5	7	14	16	5	8	4	3	14	9	15	4	9	6	8	5	16	9	12	5	5	5	27	4	...	1	160	6.7			
" 26.....	3	4	19	3	...	1	...	0	9	8	10	2	22	3	2	5	6	10	8	7	18	5	30	6	7	29	2	5	9	8	10	7	13	7	15	7	16	8	19	9	15	14	4	14	5	9	11	180	7.5
" 27.....	9	14	8	14	7	15	7	17	7	16	7	15	6	14	8	14	8	15	8	17	10	19	12	16	11	13	8	14	9	14	9	12	9	11	9	9	9	8	9	10	326	13.6							
" 28.....	9	7	7	9	9	11	9	6	9	4	...	0	...	0	9	6	7	12	7	22	7	20	7	23	7	19	7	19	6	15	8	14	8	20	9	11	8	15	10	18	336	14.0							
" 29.....	9	16	7	17	6	17	7	14	8	17	8	15	8	17	9	23	8	20	8	15	8	19	8	16	9	19	8	19	8	16	9	12	8	9	10	9	12	8	361	15.0									
" 30.....	10	5	10	6	9	4	8	5	6	6	4	6	3	6	4	7	7	8	10	8	9	9	13	8	11	9	7	11	5	9	8	13	6	13	4	...	1	12	4	12	6	11	5	144	6.0				
" 31.....	1	...	1	...	1	...	1	...	0	...	0	...	0	...	0	16	3	23	6	23	4	9	9	30	12	...	1	...	1	25	3	0	...	0	24	2	...	1	...	0	...	0	0	...	0	46	1.9		
Sums.....	235	...	243	...	255	...	237	...	223	...	210	...	198	...	217	...	289	...	331	...	391	...	388	...	393	...	428	...	409	...	400	...	383	...	325	...	271	...	240	...	218	...	199	...	222	...	211	6916	288.2
Hourly Means.....	7.6	...	7.8	...	8.2	...	7.6	...	7.2	...	6.8	...	6.4	...	7.0	...	9.3	...	10.7	...	12.6	...	12.5	...	12.7	...	13.8	...	13.2	...	12.9	...	12.4	...	10.5	...	8.7	...	7.7	...	7.0	...	6.4	...	7.2	...	6.8	223.1	9.3

TABLE VIII.

MEAN HOURLY COMPONENTS AND MEAN DIRECTION OF THE WIND, FOR AUGUST.

Hour.	Components (miles per hour).						Dir.
	N	E	S	W	+N-S	+E-W	
1 a.	0.2	2.4	3.7	3.2	-3.6	-0.8	S 1
2 "	0.0	2.2	3.6	3.7	3.6	1.5	S 2
3 "	0.2	2.2	3.6	4.1	3.4	1.9	S 2
4 "	0.2	1.9	3.2	3.9	3.0	1.9	S 3
5 "	0.1	2.1	2.7	3.8	2.6	1.6	S 3
6 "	0.3	1.6	2.7	3.5	2.5	1.8	S 3
7 "	0.5	1.6	2.4	3.5	2.0	1.8	S 4
8 "	0.3	2.2	2.1	3.6	1.8	1.4	S 3
9 "	0.5	3.6	2.4	4.3	1.9	0.7	S 2
10 "	0.4	3.9	3.0	4.9	2.6	1.0	S 2
11 "	0.0	4.3	4.1	5.7	4.1	1.4	S 1
Noon.	0.6	4.7	3.7	5.2	3.1	0.5	S
1 p.	0.5	4.5	4.0	5.4	3.5	0.9	S 1
2 "	0.0	5.0	5.1	5.9	5.1	0.9	S 1
3 "	0.3	4.9	5.3	5.2	5.0	0.3	S
4 "	0.0	4.9	5.5	5.2	5.5	-0.3	S
5 "	0.0	5.1	5.4	4.0	5.4	+1.1	S 1
6 "	0.0	4.4	4.5	3.6	4.5	0.7	S
7 "	0.3	3.8	3.2	3.0	2.9	0.8	S 1
8 "	0.0	3.3	2.9	2.7	2.9	0.6	S 1
9 "	0.0	3.2	2.9	2.3	2.8	0.9	S 1
10 "	0.3	2.7	3.1	1.7	2.8	0.9	S 1
11 "	0.6	2.8	3.2	2.3	2.6	0.6	S 1
Midt.	0.1	2.7	2.8	2.5	-2.7	+0.2	S
Mean,.....	0.2	3.3	3.5	3.9	-3.3	-0.5	S 1

TABLE IX.

DIRECTION AND FORCE OF THE WIND AT VICTORIA PEAK, AND SEA DISTURBANCE.

DATE.	4 a.			10 a.			4 p.			10 p.	
	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.
1886.											
Aug. 1,.....	3	SW	6	2	SW	6	2	SW	6
" 2,.....	2	SW	6	2	SW	6	2	SW	4
" 3,.....	2	SSW	4	2	SW	5	2	SW	5
" 4,.....	2	SW	5	2	SW	5	3	S	5
" 5,.....	1	SW	4	2	SW	4	2	SW	4
" 6,.....	0	SSW	4	0	SW	5	1	SW	4
" 7,.....	1	SW	1	1	SW	5	2	SW	6
" 8,.....	2	WSW	2	2	S	4	2	S	4
" 9,.....	2	W	4	2	SW	5	2	SW	5
" 10,.....	1	SSW	3	1	SW	4	1	SW	5
" 11,.....	2	SSW	5	2	SW	4	2	SW	4
" 12,.....	0	W	3	1	SSW	4	1	SSW	3
" 13,.....	1	WNW	5	1	SSW	5	1	SSW	6
" 14,.....	2	W	4	3	SW	6	3	SW	6
" 15,.....	3	SSW	6	2	SW	6	3	SW	5
" 16,.....	2	SW	6	2	SW	5	2	SW	5
" 17,.....	3	SSW	5	2	SW	6	1	SW	6
" 18,.....	0	WSW	4	0	SW	3	1	WSW	4
" 19,.....	0	W	3	1	SW	4	0	...	0
" 20,.....	0	W	3	0	NE	3	1	E	2
" 21,.....	0	S	3	1	SE	2	0	SE	3
" 22,.....	0	SE	3	0	SE	2	0	SE	1
" 23,.....	0	SW	3	1	E	4	1	SE	5
" 24,.....	0	E	5	2	E	4	2	E	5
" 25,.....	0	SE	6	0	SE	5	0	S	6
" 26,.....	0	S	4	0	S	5	0	SE	5
" 27,.....	2	SE	5	2	SE	4	2	SE	4
" 28,.....	E	4	1	E	4	3	E	6	3	E	6
" 29,.....	E	5	0	E	6	2	ESE	4	1	SE	6
" 30,.....	SSE	4	0	SE	3	0	SSE	2	1	SE	1
" 31,.....	SE	2	0	NE	2	0	E	4	0	E	2
Mean,.....	1.0	S 25° W	4.1	1.3	S 17° W	4.4	1.4	S 12° W	4.3

TABLE X.
VICTORIA PEAK.

E.	BAROMETER.			TEMPERATURE.							
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	Sum.	Max.	Min.	Rad.	
1.	ins.	ins.	ins.	°	°	°	°	°	°	°	°
2.	27.982	27.879	27.915	74.8	74.4	74.4	136.0	77.0	73.8	71.3	
3.	.956	.912	.984	75.4	76.2	74.6	126.0	77.8	73.8	73.2	
4.	28.034	.980	.996	75.6	75.8	74.8	119.0	77.0	74.6	74.2	
5.	.036	.980	.986	74.8	76.4	74.4	129.0	77.0	73.8	73.2	
6.	.049	28.014	28.034	74.8	75.8	74.4	144.0	77.5	72.9	73.2	
7.	.101	.072	.105	75.4	76.0	74.4	140.0	77.2	73.8	73.2	
8.	.101	.036	.025	75.5	76.8	75.5	140.2	78.5	73.9	72.8	
9.	.051	27.987	.010	77.6	76.6	76.2	149.0	79.4	74.4	72.2	
10.	27.989	.917	27.965	76.4	76.8	74.8	142.0	79.0	73.6	70.2	
11.	.979	.913	.935	76.7	76.6	75.2	145.7	80.1	74.†	71.2	
12.	.946	.881	.909	75.9	74.6	72.7	131.7	77.1	72.†	69.2	
13.	.917	.844	.874	75.4	72.2	73.6	147.6	77.5	72.†	70.2	
14.	.846	.783	.824	73.8	76.4	74.4	136.6	78.5	71.†	70.2	
15.	.800	.748	.759	76.0	75.4	74.2	139.9	79.5	73.†	70.2	
16.	.792	.759	.849	74.6	75.0	72.8	111.0	76.1	72.†	72.2	
17.	.906	.861	.878	74.8	74.6	73.8	108.8	77.3	72.†	73.2	
18.	.934	.883	.885	75.0	75.4	74.4	130.8	76.6	73.†	69.2	
19.	.901	.875	.866	75.5	76.5	74.8	147.5	79.1	73.†	71.2	
20.	.891	.841	.886	77.0	78.4	76.8	140.9	81.1	74.†	71.2	
21.	.914	.900	.932	79.0	79.6	75.6	146.4	80.7	74.†	71.2	
22.	.973	.936	.969	75.8	76.8	74.0	141.1	78.1	73.†	69.2	
23.	28.003	.947	.946	74.6	76.6	75.0	145.3	77.9	73.†	71.0	
24.	27.987	.946	.994	76.8	77.0	74.7	149.5	78.3	74.†	72.2	
25.	.987	.912	.925	74.2	74.8	73.8	148.5	76.1	73.†	69.2	
26.	.948	.906	.893	72.8	73.0	72.2	135.9	76.1	72.†	68.2	
27.	.994	.964	.922	72.0	71.0	71.0	93.3	75.1	71.†	71.0	
28.	28.057	28.075	28.085	72.8	74.2	73.2	124.2	75.5	70.†	70.2	
29.	.072	.031	.073	73.8	76.0	72.8	133.0	76.1	72.†	70.4	
30.	.062	.027	.047	75.6	77.0	73.8	140.9	77.3	72.†	70.6	
31.	.081	.049	.084	75.1	75.7	75.0	153.9	78.3	73.†	70.2	
32.	.087	.042	.067	77.2	75.4	74.6	144.3	77.8	73.†	71.2	
33.	27.980	27.932	27.956	75.3	75.7	74.3	136.2	77.8	72.9	71.1	

† Approximate.

TABLE XI.
HUMIDITY AT THE OBSERVATORY AND AT VICTORIA PEAK.

DATE. 1886.	RELATIVE HUMIDITY.						TENSION OF AQUEOUS VAPOUR.					
	OBSERVATORY.			VICTORIA PEAK.			OBSERVATORY.			VICTORIA PEAK.		
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.
1.	77	77	84	99	95	95	0.902	0.897	0.901	0.852	0.812	0.812
2.	77	74	81	100	96	99	.936	.887	.891	.882	.871	.850
3.	73	70	81	99	96	98	.875	.867	.898	.879	.859	.848
4.	78	75	82	98	89	95	.902	.879	.885	.848	.811	.812
5.	73	72	83	98	93	92	.848	.841	.874	.843	.827	.780
6.	75	68	83	95	88	96	.879	.852	.881	.840	.800	.820
7.	74	70	82	91	87	97	.869	.901	.899	.798	.806	.855
8.	68	77	85	85	94	93	.846	.928	.937	.812	.866	.846
9.	74	69	85	91	94	98	.893	.924	.952	.827	.872	.848
10.	69	67	83	90	85	91	.837	.826	.914	.828	.784	.826
11.	62	78	85	98	94	95	.773	.862	.835	.875	.809	.770
12.	68	71	89	92	93	94	.778	.755	.853	.807	.730	.782
13.	75	70	81	95	93	98	.846	.874	.856	.796	.844	.828
14.	71	70	85	84	96	93	.848	.900	.890	.755	.848	.790
15.	83	81	81	99	98	98	.921	.916	.859	.850	.845	.792
16.	81	85	83	98	99	99	.892	.926	.898	.848	.850	.827
17.	75	81	91	98	98	96	.876	.903	.827	.849	.856	.820
18.	80	73	90	95	93	95	.910	.938	.943	.847	.851	.823
19.	77	64	90	93	82	93	.907	.859	.919	.870	.806	.864
20.	70	83	93	86	84	85	.872	.911	.928	.852	.845	.757
21.	79	78	89	94	82	90	.901	.837	.871	.839	.758	.761
22.	77	77	91	93	90	88	.794	.842	.890	.801	.825	.772
23.	76	77	83	89	87	94	.888	.866	.862	.814	.811	.808
24.	85	78	85	96	94	94	.869	.850	.856	.815	.814	.783
25.	89	85	92	98	94	96	.879	.875	.854	.792	.766	.761
26.	98	93	93	94	97	98	.846	.845	.836	.740	.741	.749
27.	89	77	92	99	95	96	.886	.875	.902	.800	.806	.787
28.	69	70	84	99	84	91	.814	.817	.807	.823	.755	.737
29.	75	83	89	88	88	93	.843	.908	.891	.781	.816	.775
30.	74	80	90	93	95	88	.832	.881	.886	.807	.848	.768
31.	70	88	90	84	88	88	.793	.879	.859	.785	.775	.762
32.	76	76	86	94	92	94	0.863	0.875	0.882	0.824	0.816	0.800

TABLE XII.

AMOUNT AND CLASSIFICATION OF CLOUDS AND DIRECTION WHENCE COMING.

DATE.	1 a.			4 a.			7 a.			10 a.		
	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	
1886.												
Aug. 1,	7	cum.	SW	9	nim.	SW	10	cum. nim. cum.	SW	9	c-str. cum. c-str.	
" 2,	5	cum-str.	SSW	7	cum-nim.	SW	8	cum-nim.	WSW	4	cum.	
" 3,	6	cum.	SW	5	cum.	SSW	8	c-str. cum.	ENE	7	c-cum. cum.	
" 4,	9	cum-str.	W	5	cum.	W	9	c-cum. cum.	ENE	9	c-cum.	
" 5,	10	cum.	SW	10	cum.	SW	7	c-cum. cum.	E	7	cum-nim.	
" 6,	2	c-str. cum.	...	10	c-str. cum.	SW	6	c-cum. cum.	SW	8	c-str. c-cum.	
" 7,	2	cum.	...	2	cum.	SSE	3	cum.	S	2	sm-cum.	
" 8,	7	cum.	...	7	cum.	...	1	e-str. c-cum. cum.	...	2	cum.	
" 9,	9	cum.	SW	3	cum.	SW	7	c-str. c-cum. cum.	...	7	c-str.	
" 10,	10	nim.	...	8	cum-nim.	NW	5	cum. cum.	NW	2	cum.	
" 11,	9	c-str. c-cum. cum.	WSW	4	c-str. cum.	WSW	9	sm-cum. cum.	W	5	cum-nim.	
" 12,	8	c-str. sm-cum.	SW	7	c-str. cum.	SW	1	sm-cum. cum.	WSW	7	c-cum. cum.	
" 13,	8	sm-cum.	SW	3	cum.	SW	1	cum.	...	1	c.	
" 14,	5	c-str. cum.	WSW	3	c-str.	E	7	c-str.	ENE	5	cum.	
" 15,	10	c-str. cum.	SW	10	R-cum.	WSW	9	cum. cum. cum.	W	10	cum.	
" 16,	10	cum-nim.	WSW	10	nim.	W	10	cum-nim.	WSW	10	R-cum.	
" 17,	10	cum.	SW	10	cum-nim.	SW	10	c-str. cum-nim.	SW	10	cum-nim.	
" 18,	10	cum. nim.	WSW	10	cum-nim.	W	7	c-cum. cum-nim.	WNW	9	str. cum.	
" 19,	7	c-str. cum.	NE W	4	c-str. cum.	W	3	c-str.	W	4	cum.	
" 20,	3	c-str. cum.	W	4	c-str. cum.	W	1	cum.	W	5	cum-str.	
" 21,	9	c-str. sm-cum.	SSE	7	sm-cum. cum.	SE	7	sm-cum. cum.	SSE	4	c-cum. cum.	
" 22,	3	sm-cum. cum-nim.	SE	10	cum-nim.	SE	10	str. cum-nim.	SE	10	cum.	
" 23,	9	cum-nim.	SE	8	cum. cum-nim.	SE	1	cum.	...	4	c-str. cum.	
" 24,	2	c-cum.	E	3	cum.	SE	5	cum.	SE	10	cum. nim.	
" 25,	10	nim.	...	10	nim.	ESE	10	nim.	ESE	10	str-cum. cum-nim.	
" 26,	10	nim.	...	10	nim.	...	10	nim.	...	10	nim.	
" 27,	9	cum-nim.	SSE	10	nim.	...	10	cum-nim. nim.	S	10	c-str. cum-nim.	
" 28,	8	cum.	ESE	6	R-cum.	ESE	8	R-cum.	ESE	4	cum.	
" 29,	10	cum.	E	10	cum-nim.	ESE	8	c. cum.	ESE	4	cum.	
" 30,	1	cum.	...	4	cum.	...	6	c-str. cum.	N	9	sm-cum.	
" 31,	5	cum.	...	10	nim.	...	10	sm-cum.	N	7	c-cum. cum.	
Mean,.....	7.2	...	...	7.1	...	...	6.7	...	...	6.6	...	

TABLE XII.—Continued.

AMOUNT AND CLASSIFICATION OF CLOUDS AND DIRECTION WHENCE COMING.

Amount.	1 p.			4 p.			7 p.			10 p.			Daily and Monthly Means.
	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	
10	cum.	WSW	10	c-str.	ENE	10	c-str.	SW	10	nim.	SSW	9.4	
8	c-str.	ENE	10	cum.	WSW	10	cum-nim.	SW	3	cum.	SW	6.9	
5	cum.	SSW	10	c-str.	SW	10	c-str.	SW	8	cum-nim.	SW	6.9	
5	cum-str.	ENE	9	cum.	ENE	7	cum.	SW	9	cum.	SW	8.7	
9	cum.	SW	10	cum.	SW	10	str-cum.	SW	6	c-str.	E	8.1	
5	cum.	....	10	cum.	....	10	cum-nim.	....	7	cum.	NNE	7.0
5	cum.	E	10	cum.	NE	10	cum.	ENE	2	cum.	SSW	2.9	
8	cum.	SW	10	cum.	SW	8	cum.	SSW	9	cum.	W	6.9	
3	cum.	ENE	4	cum.	ENE	5	cum.	E	10	cum.	NNW	7.5	
8	cum.	SSW	7	cum.	SSW	10	cum.	W	10	cum.	W	7.0	
4	cum.	WSW	10	cum.	WSW	9	cum.	WSW	9	cum.	WSW	8.4	
4	cum.	NNW	6	cum.	W	10	cum.	W	10	cum.	W	7.8	
8	cum.	NW	6	cum.	....	10	cum.	....	10	cum.	....	10.0
8	cum-str.	W	9	cum.	S	9	cum.	WSW	9	cum.	WSW	8.1	
10	cum.	W	10	cum-str.	WSW	10	cum-nim.	....	10	cum.	....	10.0
10	cum-nim.	WNW	10	cum-nim.	E	10	cum-nim.	....	10	cum.	....	10.0
10	cum.	WSW	10	cum.	W	10	cum.	W	9	cum.	....	7.8
10	nim.	S	10	cum.	....	2	cum.	....	1	cum.	W	8.0
1	cum.	WSW	7	cum.	NE	10	cum.	SW	10	cum.	SW	7.1	
8	c-str.	ENE	9	cum.	W	10	cum.	....	10	cum.	....	9.9
10	cum.	SW	10	cum.	WSW	10	cum-nim.	SW	10	cum-nim.	SW	10.0	
10	R-cum.	WSW	10	R-cum.	WSW	10	str.	SW	10	str.	SW	10.0	
10	c-str.	....	10	c-str.	SW	10	cum-nim.	....	10	cum-nim.	....	10.0
10	cum-nim.	WSW	10	cum-nim.	W	10	nim.	WSW	10	nim.	....	10.0
10	str.	W	10	str-cum.	WSW	10	cum-nim.	....	10	str.	W	8.1
5	cum.	WSW	10	cum-nim.	....	10	cum-nim.	....	4	cum-nim.	W	5.0
4	cum.	....	10	cum-nim.	W	10	cum-nim.	....	8	cum-nim.	....	3.6
3	cum.	NNE	7	cum.	NNE	8	cum.	....	2	cum.	....	6.9
3	cum.	W	7	cum.	W	8	cum.	....	3	cum.	SE	4.1
8	cum.	....	10	cum.	....	7	cum.	....	0	cum.	....	5.9
7	cum.	SSE	10	cum.	SSE	7	cum.	....	0	cum.	....	9.5
4	cum.	ESE	4	cum.	ESE	2	cum.	ESE	1	cum.	SE	6.0	
8	cum.	SSE	7	cum.	ESE	9	nim.	E	3	cum-nim.	ESE	4.1	
10	cum.	ESE	10	cum.	NW	7	str-cum.	SSW	9	nim.	SSE	5.9	
10	str-cum.	....	10	cum-nim.	SSE	7	cum-nim.	S	10	nim.	....	9.5
10	nim.	....	10	str.	ESE	10	cum-nim.	....	10	nim.	....	10.0
9	cum.	SE	8	cum.	....	9	cum-nim.	NE	4	cum.	ESE	8.6
4	cum-nim.	NE	5	cum.	....	5	cum-nim.	SE	1	cum.	ESE	5.1
6	c-str.	E	5	cum.	NE	5	cum-nim.	NE	1	cum.	....	5.9
9	sm-cum.	SE	5	c-str.	ESE	3	cum.	E	1	c-str.	....	6.6
10	cum.	ESE	10	cum.	NNE	8	str-cum.	....	6	str-cum.	....	8.5
10	sm-cum.	NE	10	cum.	ENE	10	nim.	....	6	cum-nim.	....	7.1
10	cum-str.	SE	10	str-cum.	SSE	10	nim.	....	6	cum-nim.	....	7.1
7.2	...	...	8.5	...	...	7.8	...	...	6.0	...	...	7.1

TABLE XIII.

RAINFALL AT DIFFERENT STATIONS.

DATE.	OBSERVATORY.		STONE CUTTERS' ISLAND.	VICTORIA
	Amount.	Duration.		
1886.	ins.	hrs.	ins.	ins.
Aug. 1,.....	0.180	2	0.16	...
" 2,.....	...	...	...	...
" 3,.....	0.080	1	0.17	...
" 4,.....	0.010	1	...	...
" 5,.....	...	...	...	...
" 6,.....	...	...	...	...
" 7,.....	...	...	...	...
" 8,.....	...	...	...	...
" 9,.....	0.350	2	0.04	0.36
" 10,.....	...	...	0.01	...
" 11,.....	0.240	2	...	0.45
" 12,.....	...	...	...	...
" 13,.....	...	...	...	...
" 14,.....	...	...	...	...
" 15,.....	0.655	3	0.91	0.78
" 16,.....	0.005	1	0.04	..
" 17,.....	0.025	3	0.04	0.10
" 18,.....	0.005	...	...	...
" 19,.....	...	...	...	...
" 20,.....	0.005	1	...	...
" 21,.....	...	1	0.01	...
" 22,.....	0.035	1	0.05	...
" 23,.....	0.030	1	...	...
" 24,.....	1.010	10	0.75	0.71
" 25,.....	3.660	16	3.05	5.18
" 26,.....	1.925	10	2.40	2.64
" 27,.....	0.120	2	0.08	...
" 28,.....	0.005	1	...	...
" 29,.....	...	...	...	...
" 30,.....	...	...	...	...
" 31,.....	0.615	4	0.41	0.26
Total,.....	8.955	62	8.12	10.48

W. DOBERCK
Government Astronomer

Hongkong Observatory, 21st September, 1886.

HONGKONG OBSERVATORY.

Weather Report for September, 1886.

the *China Coast Meteorological Register*, based on information transmitted by the Great Northern Eastern Extension Telegraph Companies, which was daily published, is given a summary of the meteoric circumstances in Luzon and along the Coast of China, and information concerning the progress of typhoons.

Unusual visibility was noticed on the 4th, the 5th, the 6th, the 7th, and the 21st. It was hazy all day on the 10th, on the mornings of the 1st, the 12th, and the 15th, and on the evening of the 11th.

Fog occurred on the mornings of the 3rd, the 4th, and the 16th.

Rain fell on the evenings of the 1st, the 3rd, the 4th, the 7th, the 10th, the 13th, and the 15th.

Lunar coronas were seen on the 6th, the 8th, the 11th, the 13th, and the 18th.

A lunar halo was seen on the 14th.

Polar coronas were seen on the 5th, and the 11th.

Polar halos were seen on the 2nd, and the 5th.

A rainbow was seen at 5.10 p. on the 19th.

A moderate thunderstorm passed E of the Colony on the 2nd. It was nearest about 3.45 a. m. Thunder and lightning were observed on the 2nd. Lightning was seen on the 3rd, and the 4th. Between 7 p. and 10.30 p. on the 5th a thunderstorm passed from W to E. It was nearest (15°) 1 p. Lightning continued till the following morning.

Thunder and lightning E of the Colony were observed on the evening of the 17th, and lightning seen on the evenings of the 18th and 21st.

Between 8.30 p. and 10 p. on the 22nd, a thunderstorm passed from NE round by S to SW. It was nearest (10°) from 8.45 p. to 8.55 p.

The total distance traversed by, as well as the duration and average velocity of winds from different quarters were as follows:—

Direction.	Total Distance. Miles.	Duration. Hours.	Velocity. Miles per hour.
N	1152	112	10.3
NE	943	85	11.1
E	2865	191	15.0
SE	539	56	9.6
S	176	32	5.5
SW	171	22	7.8
W	457	67	6.8
NW	229	33	6.9
Calm	41	122	0.3

TABLE I.

BAROMETRIC PRESSURE FOR THE MONTH OF SEPTEMBER, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.
Sep. 1, ...	29.754	29.732	29.727	29.715	29.714	29.729	29.736	29.753	29.756	29.753	29.745	29.740	29.720	29.700	29.685	29.693	29.683	29.709	29.711	29.724	29.747	29.764	29.750	29.732	29.728
" 2, ...	.731	.729	.718	.710	.695	.702	.717	.739	.744	.744	.740	.726	.709	.703	.694	.687	.670	.675	.690	.718	.741	.755	.751	.740	.718
" 3, ...	.738	.735	.729	.712	.712	.723	.734	.744	.749	.750	.742	.727	.707	.686	.675	.664	.670	.685	.703	.716	.737	.754	.752	.740	.720
" 4, ...	.732	.715	.718	.724	.730	.728	.739	.746	.758	.752	.739	.721	.698	.671	.653	.647	.655	.673	.687	.699	.717	.730	.730	.726	.712
" 5, ...	.716	.705	.691	.692	.701	.700	.716	.731	.737	.735	.734	.713	.688	.663	.647	.640	.647	.664	.682	.696	.731	.729	.713	.717	.700
" 6, ...	.692	.681	.671	.674	.669	.673	.686	.699	.702	.716	.709	.688	.671	.641	.639	.639	.660	.667	.692	.709	.713	.716	.702	.684	
" 7, ...	.698	.688	.675	.672	.679	.686	.709	.719	.732	.743	.741	.717	.694	.678	.664	.655	.657	.666	.674	.701	.715	.728	.729	.715	.697
" 8, ...	.708	.698	.680	.675	.680	.694	.713	.734	.743	.746	.734	.719	.703	.680	.677	.675	.688	.690	.704	.721	.741	.750	.745	.739	.710
" 9, ...	.722	.711	.708	.713	.723	.735	.747	.772	.791	.799	.795	.789	.761	.737	.719	.707	.710	.728	.752	.769	.784	.783	.773	.760	.749
" 10, ...	.735	.729	.715	.715	.728	.733	.734	.758	.768	.766	.752	.732	.709	.690	.671	.661	.664	.671	.682	.703	.714	.707	.706	.697	.714
" 11, ...	.693	.678	.680	.680	.690	.709	.725	.734	.741	.743	.742	.727	.701	.687	.673	.665	.671	.681	.686	.710	.726	.725	.724	.725	.705
" 12, ...	.722	.711	.704	.700	.703	.722	.741	.760	.767	.771	.763	.740	.722	.712	.705	.704	.713	.728	.740	.766	.786	.787	.785	.780	.739
" 13, ...	.776	.769	.762	.762	.770	.779	.799	.811	.818	.819	.817	.806	.785	.766	.746	.738	.746	.758	.779	.785	.797	.794	.795	.790	.782
" 14, ...	.788	.774	.774	.782	.783	.787	.799	.813	.819	.815	.802	.778	.763	.749	.736	.735	.729	.733	.736	.750	.760	.763	.761	.757	.770
" 15, ...	.752	.734	.726	.721	.730	.730	.749	.758	.763	.763	.751	.730	.705	.684	.667	.658	.652	.657	.671	.685	.703	.703	.688	.681	.711
" 16, ...	.671	.663	.654	.644	.644	.643	.659	.670	.675	.675	.661	.641	.620	.600	.595	.595	.594	.611	.623	.626	.637	.642	.648	.641	.639
" 17, ...	.635	.626	.626	.620	.627	.633	.639	.657	.668	.668	.660	.649	.624	.600	.588	.587	.589	.600	.610	.626	.642	.635	.640	.640	.629
" 18, ...	.645	.645	.637	.632	.633	.636	.650	.649	.643	.636	.623	.603	.577	.561	.551	.548	.547	.564	.574	.600	.602	.599	.598	.603	.607
" 19, ...	.601	.593	.584	.582	.592	.610	.626	.637	.634	.625	.626	.605	.585	.581	.567	.568	.572	.592	.608	.635	.656	.672	.672	.667	.612
" 20, ...	.661	.658	.653	.650	.655	.665	.675	.689	.704	.708	.696	.686	.663	.658	.651	.646	.652	.668	.675	.692	.705	.709	.708	.703	.676
" 21, ...	.696	.689	.685	.683	.694	.707	.713	.734	.738	.741	.739	.705	.682	.664	.654	.647	.652	.671	.674	.702	.722	.727	.727	.719	.699
" 22, ...	.702	.699	.691	.688	.701	.717	.737	.747	.751	.749	.736	.707	.683	.666	.657	.654	.653	.664	.688	.703	.765	.746	.744	.742	.708
" 23, ...	.727	.718	.709	.702	.713	.733	.746	.767	.780	.789	.781	.756	.735	.708	.691	.684	.688	.706	.722	.741	.762	.774	.766	.751	.735
" 24, ...	.739	.729	.730	.737	.740	.763	.785	.807	.811	.814	.808	.784	.772	.748	.731	.731	.741	.750	.768	.784	.801	.812	.815	.808	.771
" 25, ...	.786	.779	.772	.775	.777	.792	.813	.838	.856	.863	.854	.832	.816	.798	.786	.780	.784	.799	.810	.825	.838	.852	.853	.846	.813
" 26, ...	.838	.831	.822	.826	.846	.865	.879	.890	.897	.893	.885	.865	.841	.824	.812	.807	.816	.824	.837	.854	.869	.879	.880	.872	.852
" 27, ...	.858	.848	.852	.861	.860	.878	.894	.908	.911	.915	.905	.891	.872	.857	.845	.839	.840	.857	.879	.899	.913	.906	.893	.892	.878
" 28, ...	.878	.870	.860	.859	.870	.878	.899	.911	.920	.925	.922	.907	.894	.876	.852	.853	.858	.871	.895	.907	.911	.899	.893	.886	
" 29, ...	.884	.871	.862	.858	.859	.879	.899	.920	.929	.922	.924	.912	.895	.869	.857	.850	.852	.861	.876	.896	.904	.905	.907	.887	
" 30, ...	.896	.888	.886	.880	.879	.896	.920	.932	.946	.951	.946	.930	.908	.890	.877	.870	.868	.874	.889	.916	.928	.942	.928	.915	.906
Hourly Means, }	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...
	29.739	29.730	29.723	29.721	29.727	29.737	29.753	29.768	29.775	29.776	29.769	29.752	29.731	29.713	29.699	29.694	29.697	29.709	29.722	29.741	29.759	29.763	29.760	29.753	29.738

TEMPERATURE FOR THE MONTH OF SEPTEMBER, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.	Max.	Min.
Sep. 1.....	77.3	77.3	77.2	77.3	77.3	77.5	78.3	79.5	81.6	81.4	82.9	82.5	82.9	80.5	78.7	79.9	78.3	77.9	77.8	78.0	77.7	78.1	77.7	77.0	78.9	83.0	76.9
" 2.....	76.7	76.6	76.9	76.6	76.6	77.0	78.0	80.4	82.3	81.0	82.5	82.9	83.1	82.4	82.2	81.4	80.5	80.2	79.4	79.5	79.5	78.8	78.8	78.7	79.7	83.1	76.2
" 3.....	78.0	78.6	78.3	78.4	78.7	79.2	80.0	81.7	83.8	84.7	85.2	86.1	86.7	85.2	85.8	83.7	84.2	82.3	81.2	80.2	79.6	79.1	78.3	77.4	81.5	86.7	77.4
" 4.....	77.9	77.9	77.8	78.0	78.4	78.3	79.9	81.3	82.9	86.1	84.7	85.0	85.1	87.0	86.9	85.8	84.4	81.9	81.6	80.6	80.5	80.0	79.5	79.5	81.7	87.1	77.4
" 5.....	79.4	79.5	79.0	79.1	79.2	79.0	80.7	82.0	82.5	83.4	78.7	83.2	84.0	84.2	86.8	85.1	83.2	82.5	82.1	82.8	76.8	77.6	76.9	77.1	81.0	86.8	76.7
" 6.....	77.0	77.4	77.6	77.0	77.5	77.8	79.0	79.0	80.7	81.1	81.8	81.6	81.8	82.6	84.1	82.9	81.7	81.1	79.7	79.8	79.9	80.1	79.6	78.5	80.0	84.3	77.0
" 7.....	77.8	77.1	76.4	76.5	76.6	75.8	76.7	77.9	79.3	80.1	80.3	82.6	82.9	84.0	83.7	82.2	80.3	78.8	78.2	77.8	77.0	76.1	76.6	76.0	78.8	84.0	75.8
" 8.....	76.4	76.3	75.5	75.8	75.5	75.7	77.0	77.9	80.1	82.3	83.3	82.9	83.2	82.9	82.4	81.2	80.4	79.3	79.0	78.6	78.5	78.0	77.6	77.6	79.1	83.6	75.4
" 9.....	77.4	76.9	75.6	75.8	75.4	78.6	73.1	74.8	75.7	76.0	77.3	76.8	78.0	78.3	77.9	77.7	78.7	78.8	78.3	78.0	77.8	77.6	76.9	76.0	78.8	72.3	
" 10.....	76.0	75.6	75.6	75.9	75.5	75.7	77.3	79.0	79.9	81.2	82.2	82.3	82.4	83.2	82.6	82.2	81.3	79.6	78.3	77.5	76.5	75.8	76.6	78.7	84.1	75.2	
" 11.....	77.0	76.4	76.4	76.0	75.5	75.5	76.0	77.1	78.7	79.5	81.0	82.3	83.4	82.7	82.6	82.9	81.3	80.3	78.4	76.7	77.0	77.1	76.5	75.9	78.6	84.5	75.1
" 12.....	75.4	75.7	75.8	75.6	76.0	76.2	76.7	77.5	78.9	81.1	81.8	83.6	83.0	83.4	83.3	81.1	80.4	79.8	78.5	78.1	77.7	77.2	77.1	77.3	78.8	83.6	75.4
" 13.....	77.0	76.0	76.3	76.1	76.3	76.6	77.1	78.0	79.4	82.2	83.1	81.9	83.9	83.2	84.1	84.4	81.1	80.0	78.8	77.6	76.9	76.5	76.1	76.1	79.1	85.3	76.0
" 14.....	75.6	75.3	76.4	75.8	75.4	75.3	77.4	78.8	81.9	82.9	82.8	84.7	84.1	85.2	83.6	82.6	80.5	79.5	79.3	78.3	77.6	77.0	76.4	76.3	79.3	85.2	75.1
" 15.....	76.1	76.1	76.1	75.9	75.9	76.2	77.2	77.9	80.1	83.0	83.6	84.9	84.9	85.8	84.4	83.5	80.9	80.2	80.0	79.1	78.6	78.2	78.0	77.6	79.8	85.8	75.8
" 16.....	76.2	76.6	76.8	77.2	76.6	76.6	77.9	79.3	84.0	85.7	86.2	86.1	86.8	86.4	87.0	85.5	83.9	81.8	80.9	79.9	79.3	79.7	79.3	78.6	81.2	87.2	76.2
" 17.....	78.9	78.2	78.6	78.8	79.1	79.3	80.0	81.1	82.3	83.4	84.9	86.4	87.1	87.0	86.4	84.9	83.3	81.7	80.6	80.3	80.3	80.0	78.9	78.9	81.7	87.1	78.0
" 18.....	79.0	78.9	79.3	79.2	79.2	79.5	80.1	81.3	82.9	86.1	87.1	86.7	87.3	87.5	87.9	85.7	84.7	83.1	82.0	81.1	80.9	81.1	80.5	81.4	82.6	87.9	78.9
" 19.....	80.8	80.6	80.6	81.2	81.9	81.8	82.1	83.8	84.5	86.6	86.8	88.1	85.8	86.0	87.8	87.5	85.2	83.5	83.5	83.1	82.9	82.5	81.3	81.0	83.7	88.4	80.6
" 20.....	80.7	80.4	80.1	79.6	79.3	79.4	80.1	81.9	82.3	83.4	84.6	84.9	84.8	84.9	83.6	83.1	82.0	82.0	81.7	80.8	81.1	80.1	80.2	79.8	81.7	85.3	79.3
" 21.....	79.8	78.6	78.6	78.1	78.0	77.3	78.9	79.1	82.1	83.2	83.7	84.4	84.4	84.3	84.8	84.2	83.3	82.1	81.0	80.4	80.4	80.3	80.0	79.1	81.1	85.3	76.5
" 22.....	79.1	79.2	79.1	79.2	79.2	79.5	80.7	82.0	82.7	84.1	85.2	85.7	85.9	86.2	85.1	84.6	83.1	82.6	82.4	81.8	75.9	75.3	77.2	77.5	81.4	87.1	75.2
" 23.....	77.4	76.6	76.6	76.5	76.2	76.4	77.0	77.7	79.2	80.8	82.3	84.3	84.7	84.3	84.7	84.5	83.7	81.9	81.2	80.8	79.7	78.7	77.6	76.2	80.0	85.9	76.2
" 24.....	76.0	75.1	74.6	74.2	73.9	73.5	74.2	75.6	77.0	78.9	79.5	80.8	81.8	82.3	82.2	82.6	80.7	77.4	76.2	75.9	76.0	76.0	75.4	75.3	77.3	82.6	73.4
" 25.....	74.9	75.0	75.0	75.6	75.1	74.8	76.2	77.0	78.5	79.8	79.8	80.0	79.4	79.3	78.9	79.0	77.7	77.5	77.4	77.1	76.9	76.9	76.8	76.7	77.3	80.0	74.7
" 26.....	76.1	76.5	76.2	76.1	76.4	76.1	76.7	77.4	78.3	79.7	80.7	81.8	82.4	81.0	79.9	79.8	79.4	78.0	77.4	77.6	77.8	77.8	77.9	78.3	82.7	75.6	
" 27.....	78.0	78.0	75.7	75.4	76.0	75.8	76.5	77.7	78.9	80.0	79.4	80.7	79.8	79.9	80.6	78.9	78.3	78.0	78.0	78.1	77.8	77.8	77.8	78.1	80.7	75.1	
" 28.....	77.7	77.5	77.4	76.8	76.6	76.4	77.2	78.0	78.4	79.7	79.1	79.9	79.8	80.3	79.8	78.6	78.4	78.1	77.6	77.6	77.9	78.1	77.9	77.9	78.2	80.5	76.4
" 29.....	78.0	77.9	77.4	77.3	76.9	76.8	77.3	78.2	79.4	80.0	80.5	80.6	80.8	81.1	80.1	79.1	78.7	78.1	77.6	77.8	78.1	78.0	77.9	77.7	78.6	81.1	76.6
" 30.....	77.7	77.6	77.1	76.7	76.6	76.6	77.0	78.1	79.0	79.1	79.3	80.3	79.8	80.1	78.9	78.2	78.0	77.0	77.2	77.5	77.8	77.7	77.3	77.3	78.0	80.3	76.5
Hourly Means,	77.5	77.3	77.1	77.1	77.0	77.0	77.9	79.0	80.6	81.9	82.3	83.1	83.3	83.4	83.2	82.4	81.3	80.2	79.5	79.1	78.5	78.3	77.9	77.7	79.7	84.3	76.2

(66)

TABLE III.

TEMPERATURE OF EVAPORATION AND RADIATION, FOR THE MONTH OF SEPTEMBER, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.	Sun.	Rad.	
Sep. 1.....	76.1	75.9	75.4	75.8	75.6	75.3	75.6	75.1	76.1	76.4	76.6	76.7	76.3	75.9	77.2	76.5	76.8	76.2	76.1	76.4	75.5	75.5	75.7	75.3	76.0	151.4	75.0	
" 2.....	75.5	75.2	75.3	75.5	75.4	75.7	76.4	76.5	77.9	76.6	76.7	76.3	76.6	76.8	76.9	77.1	76.6	76.3	76.4	76.4	76.7	76.8	76.3	76.6	76.4	145.2	73.9	
" 3.....	76.6	76.6	76.5	76.3	76.8	76.8	77.2	77.3	77.3	77.4	76.2	76.5	76.7	76.5	77.1	75.9	78.7	74.2	74.7	76.3	76.2	75.5	75.4	75.0	76.2	142.2	74.2	
" 4.....	75.4	75.0	74.9	74.5	74.5	74.8	75.3	76.6	75.7	77.0	76.7	76.3	76.1	76.8	77.4	76.6	75.8	75.6	75.6	75.5	76.7	76.5	76.5	76.7	75.9	143.3	75.2	
" 5.....	76.2	76.7	76.7	76.1	76.0	75.6	76.6	77.1	77.5	77.5	76.1	78.0	77.6	76.8	77.5	77.6	77.6	77.6	77.3	76.9	74.9	74.8	74.7	75.0	76.6	150.5	74.6	
" 6.....	74.6	74.8	75.2	70.5	69.6	69.1	69.5	68.9	70.7	71.3	71.9	73.4	73.4	73.5	73.7	71.9	72.4	72.7	71.5	71.3	71.7	70.9	68.1	67.4	71.6	142.7	72.2	
" 7.....	66.9	66.8	67.3	65.4	65.4	64.8	65.8	66.4	67.2	69.4	68.7	70.9	69.7	71.0	71.2	70.8	71.2	71.0	71.5	71.5	72.1	71.6	71.5	71.6	69.2	138.7	67.3	
" 8.....	68.4	67.7	67.7	67.9	67.2	66.7	68.2	68.7	69.9	70.4	71.8	71.5	72.4	71.8	71.6	72.7	73.1	73.6	73.6	73.5	74.1	73.9	73.8	74.3	74.1	71.0	150.1	68.6
" 9.....	73.3	74.1	73.5	73.7	72.3	69.8	70.0	70.5	70.4	71.0	70.8	70.9	72.1	71.7	73.1	72.5	71.5	71.1	71.4	71.4	71.8	71.5	72.7	71.9	71.8	119.0	71.9	
" 10.....	71.8	70.9	68.6	67.3	68.0	66.6	66.8	68.0	68.6	69.5	69.6	69.5	70.8	72.3	72.5	71.6	71.4	72.4	71.7	72.5	72.4	71.3	72.1	70.0	70.3	141.2	70.6	
" 11.....	65.7	64.6	64.2	64.7	63.6	63.8	63.5	62.7	63.3	63.1	63.5	64.6	65.4	65.8	65.5	65.1	65.8	67.5	64.8	68.3	66.9	67.6	67.5	67.8	65.2	139.9	68.4	
" 12.....	68.5	64.1	64.6	64.0	63.9	64.4	64.5	63.3	63.4	65.8	66.7	69.1	67.5	69.6	69.1	69.5	69.6	69.4	69.8	69.9	70.9	71.4	71.1	70.7	67.5	150.5	69.1	
" 13.....	70.5	70.7	70.4	71.5	70.4	71.1	71.9	71.8	71.2	71.8	70.7	71.3	70.5	71.3	69.5	68.8	71.4	70.4	69.4	69.4	69.6	69.7	67.9	66.0	70.3	155.2	68.7	
" 14.....	66.8	67.2	66.8	69.2	69.2	69.1	66.9	66.5	68.6	68.5	68.9	68.6	70.4	71.1	70.3	70.6	70.6	69.9	69.6	71.4	71.9	71.6	71.2	71.2	69.4	149.7	67.4	
" 15.....	71.5	70.6	71.6	71.5	69.5	69.8	70.3	70.4	68.7	70.4	69.8	70.4	71.5	72.0	71.8	72.4	71.2	70.0	72.5	72.0	72.4	72.6	72.2	72.7	71.2	143.1	68.9	
" 16.....	73.1	73.7	73.1	72.9	73.5	73.4	73.4	72.9	69.6	69.8	70.1	68.7	69.8	70.6	72.6	73.5	72.7	72.7	73.7	74.2	74.2	74.1	74.3	73.7	72.5	148.0	69.9	
" 17.....	74.0	74.1	74.2	74.8	75.2	75.1	75.6	75.3	74.4	74.7	74.8	75.3	76.6	76.9	76.1	76.3	76.3	75.6	75.1	75.3	75.7	75.3	74.2	74.5	75.2	151.3	73.0	
" 18.....	74.8	74.5	74.5	74.8	75.0	74.7	75.5	76.7	77.6	75.6	75.8	77.6	78.8	78.3	77.7	77.1	77.0	76.6	76.6	76.8	76.7	76.6	76.4	76.2	76.3	146.8	75.8	
" 19.....	76.9	78.1	77.8	74.8	74.0	74.3	74.7	74.2	73.6	74.2	75.1	77.1	77.2	76.9	77.5	77.3	76.2	77.5	76.0	74.5	74.4	72.7	72.1	71.3	75.3	149.4	77.3	
" 20.....	71.1	71.2	71.3	74.1	71.8	71.9	72.6	73.5	74.0	74.2	75.3	75.7	75.9	75.8	75.6	75.8	75.8	76.8	77.1	77.1	77.4	76.7	76.6	76.5	74.7	139.4	76.8	
" 21.....	75.9	75.6	75.5	75.2	74.6	74.8	75.4	75.6	76.5	75.8	74.4	74.6	74.4	74.7	74.3	75.4	75.5	75.4	74.8	75.0	75.6	75.8	75.5	75.3	75.2	150.5	75.0	
" 22.....	74.3	74.6	75.0	75.1	75.4	75.3	75.8	75.7	76.4	76.5	76.8	77.6	77.5	78.9	78.6	78.2	77.4	77.5	77.7	78.2	74.3	73.7	74.8	75.2	76.3	151.5	74.3	
" 23.....	71.4	70.1	69.5	69.0	68.6	68.9	68.5	68.4	69.1	69.9	70.2	71.6	70.0	69.6	69.4	70.6	69.6	69.9	69.3	69.1	67.3	65.6	64.7	64.8	63.6	68.7	154.0	72.8
" 24.....	63.7	63.4	63.0	62.4	62.1	62.6	62.6	63.0	63.6	64.5	64.8	67.7	67.9	67.6	67.3	67.6	68.1	67.8	67.8	67.8	67.4	67.5	68.2	67.9	65.7	137.7	68.3	
" 25.....	68.3	68.0	68.7	68.4	68.5	68.6	70.0	69.5	69.9	70.4	69.4	69.6	69.7	69.9	69.9	69.7	69.7	69.5	69.4	69.5	69.0	70.0	70.3	70.4	69.4	137.6	68.6	
" 26.....	70.4	70.5	70.3	70.2	70.9	70.9	70.5	69.5	69.3	69.6	71.1	71.5	72.4	71.5	71.1	71.4	71.1	70.5	70.3	70.1	70.8	69.8	70.2	70.7	70.6	138.7	71.3	
" 27.....	71.1	71.4	71.4	71.2	69.8	69.9	69.8	70.2	70.8	71.4	70.3	70.7	70.7	71.5	70.5	69.7	71.0	71.2	71.9	71.6	72.0	71.7	71.1	70.9	136.2	71.2		
" 28.....	70.9	70.8	71.2	70.1	69.0	68.7	69.3	69.3	69.4	69.5	69.1	69.4	69.6	70.1	70.6	70.7	70.6	70.4	70.6	70.6	71.0	71.1	71.5	71.7	71.8	70.8	135.9	74.1
" 29.....	72.1	71.9	71.7	71.5	71.3	71.0	71.4	70.6	69.8	69.5	68.7	69.4	69.6	69.8	70.4	70.0	69.9	69.5	70.5	70.4	70.8	70.9	70.6	70.8	70.5	137.3	74.0	
" 30.....	69.3	69.6	69.0	69.3	69.4	69.3	69.5	69.4	68.4	68.2	67.2	68.6	70.0	69.5	70.3	70.3	70.6	70.3	71.0	71.1	71.8	71.9	71.0	71.4	69.9	139.4	74.0	
Hourly Means,	71.8	71.6	71.5	71.3	70.9	70.8	71.1	71.1	71.3	71.5	71.6	72.3	72.6	72.8	72.9	72.8	72.7	72.6	72.6	72.8	72.7	72.5	72.3	72.1	72.0	143.9	72.1	

TABLE IV.

MEAN HOURLY AND DAILY RELATIVE HUMIDITY AND TENSION OF AQUEOUS VAPOUR
FOR THE MONTH OF SEPTEMBER, 1886.

Hour.	Hourly Mean.		Date.	Daily Mean.	
	Humidity.	Tension.		Humidity.	Tension.
			1886.		
1 a.	75	0.708	Sep. 1,.....	87	0.859
2 "	75	0.708	" 2,.....	86	0.867
3 "	75	0.702	" 3,.....	77	0.834
4 "	74	0.694	" 4,.....	76	0.818
5 "	73	0.679	" 5,.....	81	0.857
6 "	72	0.675	" 6,.....	64	0.663
7 "	70	0.675	" 7,.....	60	0.586
8 "	66	0.661	" 8,.....	66	0.652
9 "	61	0.647	" 9,.....	77	0.714
10 "	59	0.645	" 10,.....	63	0.630
11 "	58	0.636	" 11,.....	45	0.444
Noon.	57	0.653	" 12,.....	53	0.528
1 p.	58	0.662	" 13,.....	62	0.624
2 "	59	0.669	" 14,.....	58	0.587
3 "	59	0.675	" 15,.....	64	0.650
4 "	61	0.682	" 16,.....	63	0.683
5 "	65	0.694	" 17,.....	73	0.788
6 "	68	0.704	" 18,.....	74	0.823
7 "	70	0.714	" 19,.....	65	0.765
8 "	73	0.727	" 20,.....	71	0.767
9 "	75	0.731	" 21,.....	74	0.796
10 "	74	0.726	" 22,.....	78	0.839
11 "	75	0.723	" 23,.....	54	0.551
Midt.	57	0.717	" 24,.....	52	0.479
			" 25,.....	65	0.614
			" 26,.....	67	0.646
			" 27,.....	69	0.661
			" 28,.....	65	0.686
			" 29,.....	65	0.689
			" 30,.....	65	0.628
		
Mean,	68	0.688	Mean,.....	67	0.687

TABLE V.
DURATION OF SUNSHINE.

TABLE VI.
RAINFALL FOR THE MONTH OF SEPTEMBER, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Sums.
Sep. 1,	0·015	...	...	...	...	...	...	0·010	0·040	0·215	...	...	...	...	...	...	...	...	...	...	0·265
" 2,	0·015
" 3,	0·130	...	...	...	...	...	...	...	...	...	...	...	...	...
" 4,
" 5,	0·005	...	...	...	...	...	...	...	...	...	...	...	...	1·040
" 6,
" 7,
" 8,	0·020	...	...	...	...	...	...	...	...	...	...	...	...	0·020
" 9,
" 10,
" 11,
" 12,
" 13,
" 14,
" 15,
" 16,
" 17,
" 18,
" 19,	0·020
" 20,	0·040
" 21,	0·060	0·020	0·205	0·145	0·100	...	0·010	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·540
" 22,	0·990
" 23,
" 24,
" 25,
" 26,
" 27,	0·035	0·010	0·010	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·065
" 28,
" 29,
" 30,
Sums,.....	...	0·095	0·030	0·230	0·145	0·105	...	0·010	0·020	...	0·130	...	0·010	0·040	0·215	...	...	0·020	...	0·595	1·270	0·025	0·055	...	2·995

TABLE VII.

DIRECTION AND VELOCITY OF THE WIND FOR THE MONTH OF SEPTEMBER, 1886.

DATE.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Sums.	Means.																											
	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.																																			
Sep. 1.....	0	21	2	22	2	22	3	22	3	...	1	...	0	23	3	25	6	25	7	23	5	23	4	28	8	31	6	...	0	31	2	31	3	...	0	1	2	4	3	...	1	...	0	...	1	62	2.6						
" 2.....	3	3	...	0	...	1	...	0	...	1	...	0	4	2	8	6	10	11	8	16	8	13	9	18	9	17	9	22	10	17	9	15	9	15	9	11	9	8	9	7	...	1	...	1	...	0	185	7.7					
" 3.....	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...	1	62	2.6														
" 4.....	0	8	2	32	3	...	1	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	72	3.0												
" 5.....	1	26	2	20	2	23	3	...	1	23	2	...	0	23	3	24	5	22	10	24	7	24	4	27	9	21	11	20	12	19	14	19	15	21	14	26	17	19	7	18	5	23	2	26	6	167	7.0						
" 6.....	25	6	26	5	26	4	1	13	3	11	3	4	...	1	1	8	31	6	31	11	31	8	23	9	28	13	28	9	30	13	30	12	30	7	30	7	31	6	31	5	1	6	1	13	1	17	198	8.2					
" 7.....	2	15	2	11	7	4	25	4	32	5	3	4	1	7	1	8	32	8	28	6	24	7	23	4	22	5	22	6	12	8	10	12	10	14	10	9	11	9	10	5	9	3	...	1	...	1	...	1	156	6.5			
" 8.....	3	6	3	5	2	8	2	12	2	11	1	12	1	5	1	3	1	3	7	7	5	11	9	12	10	12	10	15	10	10	17	10	16	10	14	9	13	9	11	9	6	9	5	7	3	...	0	7	3	210	8.8		
" 9.....	7	2	11	4	13	5	8	10	4	9	1	10	32	11	1	11	3	9	6	8	5	10	9	9	13	8	14	9	18	9	6	7	6	4	...	0	0	0	0	0	164	6.8											
" 10.....	0	3	5	1	10	2	9	3	8	1	15	2	18	2	12	4	6	32	5	8	7	11	10	10	11	18	4	23	12	23	12	21	6	15	5	15	4	15	3	15	2	...	0	1	1	166	6.9						
" 11.....	2	9	1	19	2	15	2	11	2	15	2	9	1	21	2	30	1	29	1	19	32	14	2	8	31	9	1	6	29	7	30	5	30	5	32	8	32	4	32	2	...	0	0	0	1	257	10.7						
" 12.....	1	2	11	2	12	1	14	32	13	1	8	4	9	1	11	1	8	4	5	11	6	11	8	8	10	12	10	12	8	13	8	10	9	7	9	3	9	2	...	0	0	0	0	173	7.2								
" 13.....	0	...	0	...	0	...	1	13	2	13	2	13	2	7	5	1	8	4	5	15	4	23	9	23	7	22	6	16	4	21	3	12	5	14	5	14	3	14	2	...	0	0	14	2	14	2	80	3.3					
" 14.....	0	...	0	...	0	...	0	...	1	14	4	1	6	1	13	1	7	8	4	10	5	11	6	12	5	24	5	9	6	4	6	31	3	27	6	26	5	...	1	...	0	0	0	84	3.5								
" 15.....	0	...	1	...	1	...	0	...	0	...	0	...	1	31	3	32	6	9	4	9	4	10	11	10	12	10	11	10	6	8	8	4	6	24	5	23	2	4	3	4	2	...	0	0	0	0	86	3.6					
" 16.....	1	0	0	0	0	0	0	0	0	0	0	0	1	29	3	32	12	1	9	2	9	32	18	32	9	22	5	13	5	26	8	9	10	13	9	9	9	7	10	4	11	4	11	2	...	0	0	0	0	130	5.4		
" 17.....	0	...	0	0	0	0	0	11	2	...	1	...	1	11	2	25	9	25	7	23	8	22	8	24	9	23	9	20	8	17	9	17	7	15	8	15	7	15	4	8	3	8	11	7	2	125	5.2						
" 18.....	1	...	0	7	2	32	3	...	0	...	0	...	0	28	8	26	9	27	7	27	7	22	13	23	14	24	12	24	9	16	7	16	2	27	2	...	1	1	3	...	0	25	5	115	4.8								
" 19.....	24	3	...	1	...	1	1	4	32	12	2	4	1	4	32	7	32	7	21	7	22	9	23	12	23	13	23	11	23	10	26	10	4	8	4	6	13	4	8	4	7	2	8	1	12	184	7.7						
" 20.....	1	19	2	14	2	9	6	5	4	2	...	1	32	2	1	4	2	4	32	5	11	6	10	8	9	11	9	7	9	6	8	3	30	4	7	7	7	12	7	14	7	19	7	25	6	24	7	26	237	9.9			
" 21.....	7	24	7	20	5	17	6	15	6	22	7	18	7	22	7	18	6	20	7	22	7	19	8	20	10	18	10	14	10	15	9	14	5	17	2	17	4	...	1	24	3	26	7	25	5	29	10	330	13.7				
" 22.....	29	8	25	9	27	11	27	7	27	6	26	6	...	1	24	2	27	7	23	7	24	8	24	8	25	10	27	8	26	8	29	4	29	5	...	1	4	4	15	20	24	4	28	5	1	5	163	6.8					
" 23.....	2	14	2	16	2	15	2	11	2	14	2	8	2	19	1	26	1	22	1	19	1	15	1	17	1	12	32	13	32	12	31	15	31	12	31	9	1	5	1	9	32	11	32	13	3	16	1	21	344	14.3			
" 24.....	1	19	2	16	2	16	2	20	1	21	2	18	2	16	2	18	2	17	32	12	25	6	22	8	23	7	24	6	22	6	24	7	19	5	16	7	14	3	10	3	11	2	11	2	12	2	...	0	0	0	0	237	9.9
" 25.....	0	12	2	12	2	5	5	4	5	3	10	5	13	5	13	5	14	8	16	9	20	9	20	10	20	10	20	10	21	10	18	9	15	8	14	7	12	7	10	9	6	9	6	11	7	10	289	12.0					
" 26.....	4	9	6	11	5	8	4	8	5	12	4	11	3	13	4	13	6	10	8	11	10	12	11	12	10	18	10	22	9	22	10	19	10	16	8	14	8	14	7	15	7	16	7	17	7	12	7	14	329	13.7			
" 27.....	7	17	7	15	7	15	10	5	4	12	4	12	4	13	4	13	6	15	7	20	8	23	10	18	10	18	9	24	10	27	8	23	8	26	8	28	8	26	7	25	7	26	8	26	479	20.0							
" 28.....	7	24	7	23	6	25	6	24	6	22	6	25	7	21	7	22	9	23	10	23	11	22	10	20	10	24	10	21	9	18	8	15	7	16	8	13	7	15	7	17	7	17	7	17	7	17	496	20.7					
" 29.....	7	16	7	18	5	18	5	19	6	17	6	16	4	15	6	17	5	18	7	21	8	22	10	22	10	23	10	22	10	22	8	17	7	16	7	16	7	20	7	23	7	22	463	19.3									
" 30.....	6	25	7	23	7	24	7	22	7	24	5	29	6	21	6	24	7	22	7	24	7	22	8	20	8	21	10	24	9	22	7	20	7	17	7	19	7	20	8	26	7	23	7	24	530	22.1							
Sums.....	223	...	235	...	230	...	232	...	252	...	223	...	234	...	297	...	317	...	328	...	322	...	359	...	354	...	364	...	375	...	348	...	298	...	267	...	232	...	227	...	219	...	205	...	204	...	228	6573	273.9				
Hourly Means.....	7.4	...	7.8	...	7.7	...	7.7	...	8.4	...	7.1	...	7.8	...	9.9	...	10.6	...	10.9	...	10.7	...	12.0	...	11.8	...	12.1	...	12.5	...	11.6	...	9.9	...	8.9	...	7.7	...	7.6	...	7.3	...	6.8	...	6.8	...	7.6	219.1	9.1				

TABLE VIII.

MEAN HOURLY COMPONENTS AND MEAN DIRECTION OF THE WIND, FOR SEPTEMBER, 1886.

Hour.	Components (miles per hour).						Direction.
	N	E	S	W	+ N-S	+ E-W	
1 a.	3.2	4.3	0.0	0.5	+3.2	+3.8	E 40° N
2 "	3.0	4.8	0.2	0.5	2.8	4.3	E 37° N
3 "	4.2	4.2	0.2	0.5	3.9	3.8	E 46° N
4 "	4.4	4.0	0.1	0.5	4.2	3.5	E 50° N
5 "	5.1	4.5	0.1	0.2	5.0	4.2	E 50° N
6 "	4.6	3.9	0.2	0.2	4.4	3.6	E 51° N
7 "	4.9	4.2	0.0	0.0	4.9	4.2	E 49° N
8 "	6.6	4.1	0.0	0.4	6.6	3.7	E 61° N
9 "	6.2	4.7	0.1	1.0	6.1	3.7	E 59° N
10 "	3.9	6.1	0.1	1.3	8.8	4.8	E 38° N
11 "	2.2	6.6	0.8	1.8	+1.4	4.8	E 16° N
Noon.	1.6	6.7	2.3	2.6	-0.7	4.1	E 10° S
1 P.	1.4	6.9	2.3	2.8	0.8	4.1	E 11° S
2 "	1.1	6.9	2.5	3.0	1.4	3.9	E 20° S
3 "	1.4	7.5	3.2	2.2	1.9	5.4	E 19° S
4 "	1.3	6.9	2.5	2.3	1.2	4.6	E 15° S
5 "	1.5	6.1	2.3	1.2	0.8	5.0	E 9° S
6 "	1.3	5.7	1.8	0.9	0.5	4.8	E 6° S
7 "	0.9	5.4	1.3	0.6	-0.4	4.8	E 5° S
8 "	1.1	5.7	0.5	0.5	+0.6	5.2	E 7° N
9 "	0.9	5.2	1.2	0.3	-0.8	5.0	E 3° S
10 "	1.1	5.3	0.3	0.4	+0.8	4.9	E 9° N
11 "	1.6	5.3	0.1	0.3	1.5	5.0	E 17° N
Midt.	2.1	4.8	0.1	0.6	+2.1	4.3	E 26° N
Mean,.....	2.7	5.4	0.9	1.0	+1.8	+4.4	E 19° N

TABLE IX.

DIRECTION AND FORCE OF THE WIND AT VICTORIA PEAK, AND SEA DISTURBANCE.

DATE.	4 a.			10 a.			4 p.			10 p.		
	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.	Sea.
1886.												
Sep. 1,.....	E	3	0	E	2	0	S	3	0	S	4	0
" 2,.....	SE	4	0	SE	4	2	E	4	1	SE	2	0
" 3,.....	ESE	2	0	ESE	2	1	ESE	2	1	...	0	0
" 4,.....	0	ENE	3	1	SSW	5	2	SSW	4	0
" 5,.....	0	SSW	5	1	SSW	5	2	SSW	5	0
" 6,.....	0	NE	4	1	NNW	4	1	NNW	5	1
" 7,.....	2	NNE	3	2	SE	2	1	SE	3	1
" 8,.....	1	NE	4	1	ENE	3	2	ENE	4	1
" 9,.....	3	ENE	5	2	E	5	2	ENE	5	1
" 10,.....	1	NE	4	1	W	4	1	ENE	4	1
" 11,.....	NE	5	...	N	4	...	N	3	0
" 12,.....	1	NNE	4	1	ENE	3	1	NE	3	0
" 13,.....	0	E	4	2	NE	3	1	NE	4	0
" 14,.....	0	NE	3	0	NE	2	0	NE	3	0
" 15,.....	0	NNE	3	1	E	3	0	ENE	3	0
" 16,.....	0	NNE	5	0	SSW	4	0	SE	4	0
" 17,.....	0	N	3	2	NE	3	0	SW	4	0
" 18,.....	0	NNE	3	1	SW	4	0	NNE	3	2
" 19,.....	0	ENE	3	1	NW	4	1	NE	3	1
" 20,.....	2	ENE	3	2	ENE	2	2	E	5	3
" 21,.....	4	E	6	4	ESE	4	3	ESE	4	2
" 22,.....	0	NNE	3	2	NW	3	1	NE	4	0
" 23,.....	0	NNE	5	2	NE	4	2	NE	4	3
" 24,.....	2	NE	4	2	NW	3	0	W	3	0
" 25,.....	4	E	5	4	E	5	3	E	4	3
" 26,.....	4	ENE	5	4	E	4	3	E	5	3
" 27,.....	5	E	6	4	E	6	4	E	6	5
" 28,.....	4	E	6	5	E	5	4	E	5	4
" 29,.....	5	E	6	5	E	5	4	E	6	5
" 30,.....	4	E	6	5	E	6	5	E	7	5
.....
Mean,.....	1.4	E 25° N	4.1	2.0	E 6° N	3.8	1.6	E 7° N	4.0	1.4

TABLE X.
VICTORIA PEAK.

DATE.	BAROMETER.			TEMPERATURE.							
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	Sun.	Max.	Min.	Rad.	
1886.	ins.	ins.	ins.	°	°	°	°	°	°	°	°
Sep. 1.....	28.058	28.009	28.000	74.4	72.7	72.4	135.9	77.1	71.9	70.2	
" 2.....	.049	.018	.017	73.8	76.8	73.8	144.3	77.5	72.4	72.3	
" 3.....	.051	27.987	.036	77.8	77.0	75.0	144.3	78.6	72.3	68.4	
" 4.....	.055	.979	.021	77.7	76.5	74.8	142.0	78.9	73.2	71.4	
" 5.....	.035	.960	27.973	73.8	75.2	73.4	143.6	77.3	73.1	70.8	
" 6.....	.007	.955	28.007	74.3	75.2	73.3	146.4	76.5	70.2	65.2	
" 7.....	.026	.974	.016	73.2	75.6	73.8	132.7	76.7	67.2	65.2	
" 8.....	.031	.990	.037	72.7	76.0	73.0	144.3	77.3	69.1	67.2	
" 9.....	.046	28.006	.046	72.2	70.6	69.1	123.1	73.9	69.1	66.2	
" 10.....	.047	27.978	27.994	72.7	75.4	70.2	139.0	76.1	68.1	65.2	
" 11.....	.031	.984	28.023	73.6	74.2	71.7	135.9	76.1	67.2	60.2	
" 12.....	.052	28.012	.040	72.6	75.2	72.6	144.3	76.8	68.3	68.2	
" 13.....	.095	.061	.089	71.6	76.2	73.6	146.4	77.3	66.1	59.4	
" 14.....	.110	.051	.033	73.0	76.2	73.0	142.2	76.9	71.1	63.2	
" 15.....	.053	27.978	27.966	74.4	76.7	73.5	147.5	78.5	71.0	65.2	
" 16.....	27.980	.926	.944	75.4	76.8	74.7	143.2	79.9	72.1	65.2	
" 17.....	.973	.925	.941	77.5	75.8	73.2	141.1	79.5	73.2	71.2	
" 18.....	.950	.889	.914	77.8	78.4	76.2	142.2	81.5	73.2	71.2	
" 19.....	.984	.907	.961	78.7	81.0	76.0	142.8	81.0	75.1	69.4	
" 20.....	28.001	.969	28.000	76.3	77.6	74.6	152.9	78.5	74.1	70.2	
" 21.....	.029	.978	.025	75.5	78.2	75.6	147.4	79.7	73.8	70.2	
" 22.....	.051	.988	.040	77.6	80.6	74.6	142.3	80.7	73.1	66.2	
" 23.....	.077	28.007	.046	72.8	77.6	71.2	143.2	77.9	70.1	62.2	
" 24.....	.088	.038	.059	71.5	76.4	71.2	130.7	76.5	67.5	63.2	
" 25.....	.125	.077	.108	72.4	73.0	69.2	137.0	75.9	68.7	67.2	
" 26.....	.172	.123	.118	72.7	72.2	70.2	134.8	75.3	69.2	66.2	
" 27.....	.179	.133	.168	72.2	72.6	69.2	131.7	75.1	69.2	66.2	
" 28.....	.191	.157	.225	72.4	70.6	68.8	131.7	74.1	68.8	65.2	
" 29.....	.184	.146	.182	71.6	73.8	69.2	131.7	74.9	68.8	66.2	
" 30.....	.210	.161	.204	70.7	71.8	69.8	134.8	73.5	68.5	66.2	
.....	
Mean,.....	28.063	28.012	28.041	74.1	75.5	72.6	140.0	77.3	70.5	66.6	

TABLE XI.
HUMIDITY AT THE OBSERVATORY AND AT VICTORIA PEAK.

DATE. 1886.	RELATIVE HUMIDITY.						TENSION OF AQUEOUS VAPOUR.					
	OBSERVATORY.			VICTORIA PEAK.			OBSERVATORY.			VICTORIA PEAK.		
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.
Sep. 1.....	78	85	89	95	95	93	0.843	0.869	0.849	0.816	0.770	0.742
" 2.....	81	82	91	98	90	86	.857	.874	.896	.819	.826	.718
" 3.....	71	68	84	84	82	82	.843	.791	.836	.805	.763	.710
" 4.....	65	64	85	81	86	94	.806	.793	.867	.775	.789	.814
" 5.....	75	70	87	98	95	88	.865	.847	.827	.811	.838	.723
" 6.....	59	57	61	85	78	74	.636	.635	.634	.719	.685	.605
" 7.....	56	55	79	69	72	72	.576	.601	.716	.568	.643	.599
" 8.....	52	65	81	75	72	93	.584	.691	.779	.610	.653	.750
" 9.....	77	76	73	88	89	85	.693	.730	.691	.692	.668	.609
" 10.....	53	58	76	70	73	83	.565	.633	.698	.571	.649	.617
" 11.....	35	34	59	58	58	60	.360	.383	.550	.484	.497	.469
" 12.....	41	53	74	65	67	71	.431	.567	.692	.517	.582	.572
" 13.....	58	42	70	87	69	63	.641	.496	.636	.671	.620	.525
" 14.....	44	53	75	74	70	70	.505	.589	.703	.602	.634	.567
" 15.....	51	57	76	74	70	75	.576	.647	.727	.628	.636	.617
" 16.....	42	54	76	65	66	74	.516	.665	.768	.572	.605	.639
" 17.....	65	66	79	82	84	95	.741	.792	.815	.781	.754	.778
" 18.....	60	66	81	86	82	76	.745	.816	.856	.818	.806	.680
" 19.....	53	61	60	74	73	75	.679	.801	.673	.726	.773	.675
" 20.....	63	70	85	83	85	94	.723	.794	.875	.752	.812	.809
" 21.....	69	64	80	91	75	90	.793	.762	.832	.806	.724	.797
" 22.....	69	71	93	85	82	85	.812	.880	.811	.812	.858	.731
" 23.....	56	47	43	77	65	67	.586	.564	.425	.619	.617	.514
" 24.....	41	43	62	63	56	72	.416	.476	.560	.487	.518	.555
" 25.....	60	60	69	76	74	85	.618	.603	.610	.602	.608	
" 26.....	58	64	64	79	82	81	.589	.658	.618	.635	.652	.602
" 27.....	64	61	72	82	71	85	.655	.604	.693	.648	.572	.608
" 28.....	58	66	71	78	89	93	.585	.646	.685	.617	.668	.658
" 29.....	57	61	70	79	69	85	.581	.613	.662	.606	.578	.608
" 30.....	54	65	74	70	79	91	.545	.636	.705	.531	.617	.663
.....
Mean,	59	61	75	79	77	81	0.646	0.682	0.724	0.670	0.680	0.652

TABLE XII.

AMOUNT AND CLASSIFICATION OF CLOUDS AND DIRECTION WHENCE COMING.

DATE.	1 a.			4 a.			7 a.			10 a.		
	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction
1886.												
Sep. 1,	10	cum-nim.	...	10	cum-nim.	...	10	str-cum.	...	9	c-str.	NNE
" 2,	3	str.	...	10	nim.	...	3	e-cum. cu-cum. cum.	NW SE E	7	cum.	...
" 3,	10	cum.	...	7	cum.	ESE	5	sm-cum.	E	1	sm-cum.	SSW ESE
" 4,	1	str.	...	2	c-str.	...	1	e-str. cum. c-str. cum.	...	1	cum.	E
" 5,	1	cum.	...	10	cum-nim.	WSW	7	cum.	N WSW	8	cum.	W
" 6,	2	cum.	SW	7	cum.	W	10	sm-cum.	W	6	c-eum.	ESE
" 7,	0	...	...	2	c-str.	...	0	...	...	1	c-str.	N
" 8,	1	cum.	...	1	cum.	...	3	e-cum.	WSW	6	cum.	WSW
" 9,	2	cum.	ESE	10	cum-nim.	E	10	cum-nim.	E	10	str. cum-nim.	SSE
" 10,	3	e-eum.	SW	9	cum.	...	5	e-str. sm-cum.	W	6	c-str. sm-cum.	W
" 11,	0	...	...	1	cum.	...	1	e-eum.	...	0	...	...
" 12,	10	cum.	SW	10	c-str. cum.	W	10	str.	W	8	sm-cum.	W
" 13,	8	sm-cum.	W	10	sm-cum.	W	8	e-str. str-cum.	SW	8	c-str. cum.	W
" 14,	8	sm-cum.	WSW	7	sm-cum.	...	8	e-str. c-cum. c-str. e-cum. c-str. e-cum.	WNW	3	c-cum.	NNW
" 15,	8	c. e-cum.	NW WNW	9	e-eum.	WNW	10	e-cum. c-str. e-cum. c-str. e-cum. c-str. e-cum.	WNW	6	e-str. c-cum.	W
" 16,	4	e-eum.	ESE	6	c-cum. cum.	N	3	SE	3	c-cum.	ENE	
" 17,	8	sm-cum.	NE	10	sm-cum.	NE	10	smi-cum.	ENE	3	sm-cum. cum.	NE
" 18,	8	smi-cum.	SW	2	smi-cum.	SW	5	e-cum.	SSW	1	c-cum. cum.	NNE
" 19,	9	cum-nim.	SSE	7	cum.	SE	4	e-cum. cum. c.	SSE	2	cum.	SSE
" 20,	9	cum.	WSW	9	cum-nim.	W	8	cum. cum.	SSE	9	cum.	NE
" 21,	10	nim.	ESE	10	nim.	ESE	10	cum-nim.	E E	5	cum.	E
" 22,	7	cum-nim.	...	4	cum.	NW	6	smi-cum.	NW	2	cum.	NNW
" 23,	4	cum.	SSE	7	R-cum.	SE	9	R-cum.	SE	1	cum.	NE
" 24,	0	...	...	2	cum.	...	0	...	...	1	c-eum.	WNW
" 25,	1	cum.	NE	6	smi-cum. cum.	NE	1	smi-cum. cum.	NE	3	cum.	NE
" 26,	1	cum.	E	4	cum.	E	1	cum.	NE	2	cum.	ENE
" 27,	3	cum-nim.	ENE	9	cum-nim.	E	4	e-cum. cum.	WNW	1	cum.	ENE
" 28,	5	cum.	E	2	cum.	E	1	cum.	ENE	1	cum.	ENE
" 29,	9	nim.	ENE	7	cum-nim.	ENE	4	cum.	ENE	1	cum.	ENE
" 30,	0	...	...	3	cum.	ENE	5	c-cum. cum.	S ENE	3	c-str.	W
.....
Mean,.....	4.8	...	...	6.4	...	...	5.4	...	...	3.9	...	...

TABLE XII,—Continued.

AMOUNT AND CLASSIFICATION OF CLOUDS AND DIRECTION WHENCE COMING.

DATE.	1 p.		4 p.		7 p.		10 p.		Daily and Monthly Means.				
	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction				
1886.													
1,.....	10	str.	...	9	c-str. nim.	NNE SE	10	str.	...	3	str-cum.	N	8.9
2,.....	7	sm-cum. cum.	SSE E	10	c-str. cum.	ESE	7	sm-cum.	E	10	cum.	...	7.1
3,.....	1	cum.	E	2	c-str. cum.	ESE	1	c-str.	...	0	...	...	3.4
4,.....	2	cum.	SE	1	c-str. cum.	...	3	c-cum.	NW	2	c-cum.	NNW	1.6
5,.....	7	e-cum. cum. cum-str.	NNW WSW WSW	7	c-str. cum.	NNW WSW	10	cum-str. cum-nim.	W SW	10	nim.	WNW	7.5
6,.....	10	sm-cum. cum.	WNW	9	c-cum. cum.	W WNW	2	sm-cum.	WNW	9	sm-cum.	W	6.9
7,.....	1	c-str. cum. c-str.	...	6	cum.	N	0	...	...	0	...	...	1.2
8,.....	5	c-str. cum. c-str.	NNE	9	sm-cum. cum.	WNW SW	9	sm-cum.	WNW	5	sm-cum.	W	4.9
9,.....	10	c-str. nim.	ENE	10	sm-cum. cum.	ENE E	10	sm-cum. cum.	W NE	10	cum. cum.	ENE	9.0
10,.....	7	e-str. c-cum. cum.	.... NW NE	8	c-cum. cum.	NE ENE	7	sm-cum.	NE	0	...	...	5.6
11,.....	8	c-cum.	NNW	5	c-cum.	NW	7	c-cum.	NW	9	sm-cum.	W	8.9
12,.....	9	sm-cum.	WNW	9	sm-cum.	WNW	10	sm-cum.	W	10	sm-cum.	W	9.5
13,.....	9	c-str. cum.	WNW N	2	c-str. cum.	WNW WNW	2	c-cum.	WNW	1	sm-cum.	NNW	6.0
14,.....	9	c-str. sm-cum.	NNW	8	c-cum. sm-cum.	W	3	c-cum.	NW	9	c-str. c-cum.	N	6.9
15,.....	3	c-str. c-cum.	W	4	c-cum. cum.	WNW NE E	0	...	...	0	...	...	5.0
16,.....	7	c-cum.	NNW	4	c-cum. cum.	ESE	9	sm-cum.	SE	7	sm-cum.	SE	5.4
17,.....	7	e-str. c-cum. cum.	.... NNE	4	c-cum. cum.	E N	7	cum.	N	10	str-cum.	NNE	7.4
18,.....	4	c-str. cum.	NNE	2	c-str. cum.	NNE	8	c-str. cum.	...	9	cum. cum.	....	4.9
19,.....	8	cum.	W	9	c-str. cum.	S NNW E	1	cum.	WNW	8	...	NNW	6.0
20,.....	10	str. cum-nim.	ENE	9	sm-cum. cum.	NNW WNW R-e. cum.	10	nim.	ENE	10	nim.	ENE	9.3
21,.....	5	sm-cum. cum.	NE NNE	7	c-cum.	NNE ENE	10	c-str.	...	10	cum.	...	8.4
22,.....	8	cum.	NNW	8	sm-cum. cum-nim.	NW SSE	1	cum.	...	10	cum-nim.	N	5.7
23,.....	1	cum.	WNW	0	...	...	0	...	...	0	...	...	2.8
24,.....	1	cum.	WNW	0	...	...	0	...	...	0	...	...	0.5
25,.....	3	sm-cum. cum.	WNW ESE	2	cum.	E	0	...	...	0	...	...	2.0
26,.....	2	c-cum. cum.	NE	4	c-cum.	E	0	...	...	1	cum.	NE	1.9
27,.....	1	cum.	ENE	1	cum.	ENE	7	cum.	ENE	10	cum-nim.	NE	4.5
28,.....	0	...	...	1	cum.	NE	1	cum.	ENE	1	cum.	ENE	1.5
29,.....	1	cum.	...	0	...	...	0	...	...	0	...	...	2.7
30,.....	1	c-str.	...	0	...	...	1	cum.	ENE	4	cum.	ENE	2.1
.....
Mean,.....	5.2	...	...	5.0	...	...	4.5	...	...	5.3	...	...	5.1

TABLE XIII.
RAINFALL AT DIFFERENT STATIONS.

DATE.	OBSERVATORY.		STONE CUTTERS' ISLAND.	VICTORIA PEAK
	Amount.	Duration.	Amount.	Amount.
1886.	ins.	hrs.	ins.	ins.
Sep. 1,.....	0.280	2	0.20	...
" 2,.....	...	...	...	...
" 3,.....	...	...	...	...
" 4,.....	0.005	...	...	...
" 5,.....	1.035	4	1.01	1.40
" 6,.....	...	...	...	...
" 7,.....	...	...	...	...
" 8,.....	0.020	1	0.06	0.16
" 9,.....	...	2	...	...
" 10,.....	...	...	...	...
" 11,.....	...	...	...	...
" 12,.....	...	...	...	...
" 13,.....	...	...	...	...
" 14,.....	...	...	...	...
" 15,.....	...	...	...	...
" 16,.....	...	...	0.02	...
" 17,.....	...	...	...	...
" 18,.....	0.020	1	...	...
" 19,.....	0.580	8	0.57	0.88
" 20,.....	...	...	...	...
" 21,.....	0.990	1	1.15	1.98
" 22,.....	...	...	...	...
" 23,.....	...	...	...	...
" 24,.....	...	...	...	...
" 25,.....	...	...	...	...
" 26,.....	0.055	2	0.11	...
" 27,.....	0.010	1	0.16	...
" 28,.....	...	...	...	...
" 29,.....	...	...	...	...
" 30,.....	...	...	...	...
Total,.....	2.995	22	3.28	4.42

W. DOBERCK,
Government Astronomer.

Hongkong Observatory, 18th October, 1886.

HONG KONG OBSERVATORY.

Weather Report for October, 1886.

In the *China Coast Meteorological Register*, based on information transmitted by the Great Northern and Eastern Extension Telegraph Companies, which was daily published, is given a summary of the atmospheric circumstances in Luzon and along the Coast of China, and information concerning the weather in Nagasaki and Vladivostock. It contains also information concerning the first appearance and progress of typhoons.

Unusual visibility was noted on the 5th, the 30th, and the 31st.

It was hazy on the mornings of the 10th, the 11th, and the 20th.

Fog occurred on the mornings of the 21st, and the 25th.

A rainbow was observed at 5.30 p. on the 13th and at 7 a. on the 26th.

Dew fell on the evenings of the 10th, the 19th, the 20th, the 25th, and the 28th.

A lunar halo was seen on the 12th.

A solar corona was seen on the 5th.

A solar halo was seen on the 2nd.

A thunderstorm occurred on the 12th. Thunder began about 5 p. The storm passed from E to N towards W between 7 p. and 9 p. It was nearest (30s.) between 7.10 and 7.45 p.

Lightning was seen on the 17th, and the 21st.

Direction.	Total Distance. Miles.	Duration. Hours.	Velocity.
			Miles per hour.
N	1284	83	15.5
NE	1064	70	15.2
E	8013	478	16.8
SE	471	47	10.0
S	36	8	4.5
SW	18	3	6.0
W	174	24	7.3
NW	29	5	5.8
Calm	12	26	0.5

TABLE I.
BAROMETRIC PRESSURE FOR THE MONTH OF OCTOBER, 1896.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.
Oct. 1, ...	29.903	29.894	29.883	29.877	29.888	29.893	29.910	29.928	29.931	29.916	29.901	29.885	29.862	29.842	29.839	29.840	29.843	29.860	29.867	29.879	29.874	29.867	29.852	29.882	
" 2, ...	.844	.836	.827	.818	.823	.823	.848	.867	.875	.875	.858	.834	.806	.790	.780	.786	.786	.795	.821	.829	.830	.823	.813	.824	
" 3, ...	.792	.778	.766	.784	.793	.797	.824	.846	.864	.861	.856	.833	.820	.810	.804	.793	.799	.813	.827	.844	.851	.853	.838	.836	.820
" 4, ...	.826	.814	.810	.827	.832	.837	.849	.868	.879	.884	.879	.863	.842	.818	.805	.802	.812	.819	.838	.852	.869	.876	.873	.864	.843
" 5, ...	.852	.851	.842	.844	.848	.851	.873	.888	.899	.896	.887	.869	.842	.828	.821	.821	.825	.842	.854	.873	.889	.894	.891	.872	.860
" 6, ...	.860	.845	.838	.838	.846	.860	.869	.893	.900	.897	.895	.874	.854	.835	.825	.828	.838	.837	.855	.882	.892	.898	.890	.880	.864
" 7, ...	.868	.851	.849	.847	.859	.864	.884	.900	.910	.914	.901	.884	.858	.833	.827	.824	.825	.836	.850	.872	.886	.886	.879	.869	.866
" 8, ...	.851	.831	.825	.818	.819	.838	.850	.872	.877	.871	.850	.832	.808	.779	.770	.765	.766	.781	.799	.824	.832	.836	.833	.816	.823
" 9, ...	.797	.786	.784	.780	.790	.803	.818	.826	.835	.836	.819	.794	.764	.733	.715	.715	.702	.702	.710	.721	.736	.747	.754	.751	.744
" 10, ...	.726	.717	.706	.701	.707	.708	.725	.734	.749	.737	.715	.688	.656	.630	.617	.616	.620	.631	.649	.670	.686	.700	.710	.701	.687
" 11, ...	.683	.664	.649	.645	.653	.674	.691	.706	.716	.706	.696	.677	.648	.623	.610	.606	.619	.639	.663	.695	.709	.721	.728	.720	.673
" 12, ...	.714	.708	.714	.713	.727	.743	.761	.782	.800	.787	.768	.746	.726	.716	.714	.732	.753	.773	.812	.842	.844	.858	.860	.766	
" 13, ...	.843	.823	.808	.817	.822	.850	.863	.891	.902	.912	.901	.886	.871	.844	.826	.832	.836	.846	.865	.885	.903	.911	.915	.914	.865
" 14, ...	.893	.883	.873	.867	.883	.902	.933	.939	.958	.956	.941	.928	.903	.882	.877	.880	.886	.894	.918	.935	.927	.929	.939	.938	.911
" 15, ...	.924	.909	.904	.914	.934	.945	.954	.967	.983	.983	.981	.968	.941	.919	.898	.896	.903	.910	.917	.935	.943	.942	.936	.919	.934
" 16, ...	.895	.888	.882	.880	.880	.898	.911	.930	.936	.935	.923	.889	.869	.853	.841	.846	.849	.853	.869	.888	.902	.903	.901	.903	.889
" 17, ...	.888	.867	.857	.860	.870	.888	.903	.920	.924	.918	.908	.891	.875	.854	.842	.841	.853	.860	.890	.916	.935	.935	.934	.921	.890
" 18, ...	.910	.898	.894	.893	.896	.905	.920	.939	.949	.947	.933	.917	.902	.879	.857	.859	.865	.873	.891	.905	.921	.922	.920	.920	.905
" 19, ...	.913	.898	.889	.883	.889	.901	.917	.931	.956	.950	.939	.914	.889	.865	.857	.857	.868	.882	.900	.922	.933	.937	.932	.926	.906
" 20, ...	.919	.898	.894	.888	.891	.908	.924	.945	.954	.943	.927	.900	.863	.835	.820	.814	.816	.821	.838	.871	.883	.884	.874	.863	.882
" 21, ...	.850	.848	.843	.838	.843	.856	.869	.888	.900	.901	.890	.864	.833	.821	.812	.810	.812	.832	.855	.879	.888	.887	.889	.898	.859
" 22, ...	.893	.890	.884	.883	.890	.909	.929	.921	.937	.935	.929	.937	.912	.904	.897	.901	.911	.924	.934	.954	.962	.969	.969	.969	.927
" 23, ...	29.968	29.961	.962	.964	.971	.993	30.008	30.028	30.036	30.035	30.019	30.000	.984	.973	.963	.960	.969	.975	.998	30.023	30.033	30.041	30.040	30.038	.998
" 24, ...	30.026	30.004	.991	.978	.979	.988	30.003	30.011	30.014	30.014	29.999	29.969	.927	.890	.876	.858	.863	.864	.869	29.881	29.893	29.894	29.889	29.874	.940
" 25, ...	29.853	29.836	.824	.813	.818	.835	29.843	29.852	29.864	29.870	.860	.832	.797	.765	.743	.743	.748	.757	.773	.790	.810	.811	.811	.809	.811
" 26, ...	.801	.784	.778	.777	.786	.807	.817	.828	.844	.851	.837	.818	.796	.771	.765	.762	.768	.778	.791	.815	.830	.837	.840	.834	.805
" 27, ...	.828	.827	.817	.820	.833	.846	.870	.894	.917	.924	.915	.897	.977	.868	.866	.870	.872	.881	.896	.924	.931	.941	.939	.924	.882
" 28, ...	.913	.908	.893	.895	.895	.916	.932	.951	.962	.966	.953	.935	.912	.899	.893	.894	.900	.913	.918	29.939	29.951	29.954	29.953	29.951	.925
" 29, ...	29.939	29.933	29.925	29.926	29.932	29.954	29.967	29.988	29.996	29.998	29.997	29.979	29.959	.951	.942	.943	.950	29.966	29.988	30.014	30.028	30.028	30.027	30.024	29.973
" 30, ...	30.017	30.021	30.022	30.022	30.025	30.044	30.061	30.079	30.086	30.081	30.069	30.048	30.018	29.999	29.984	29.986	29.997	30.008	30.029	.050	.060	.063	.063	.065	30.037
" 31, ...	.066	.057	.049	.046	.050	.068	.093	.108	.113	.117	.102	.087	.051	30.027	30.026	30.030	30.033	.040	.052	.071	.085	.086	.083	.077	.067
Hourly Means, }																									
	29.873	29.862	29.854	29.853	29.860	29.874	29.891	29.908	29.919	29.919	29.907	29.886	29.862	29.841	29.830	29.828	29.834	29.844	29.860	29.882	29.894	29.898	29.897	29.890	29.874

TABLE II.

TEMPERATURE FOR THE MONTH OF OCTOBER, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.	Max.	Min.
Oct. 1.....	77.1	77.0	76.4	76.4	76.2	76.2	76.8	77.1	78.1	78.8	78.5	79.7	79.4	79.6	79.3	78.5	78.0	77.4	77.3	77.4	77.7	77.7	77.5	77.5	77.7	79.7	76.2
" 2.....	77.4	76.9	76.6	76.3	76.0	75.9	76.2	77.1	78.2	79.2	78.7	79.3	79.7	79.1	78.7	77.7	77.5	77.0	76.8	77.0	77.2	77.2	77.3	76.9	77.5	80.2	75.8
" 3.....	76.9	76.7	76.5	76.5	76.6	76.4	76.7	77.4	78.4	78.9	78.8	79.0	78.1	77.7	77.5	77.4	76.6	75.9	76.1	75.7	75.9	75.5	76.0	76.0	77.0	79.3	75.5
" 4.....	75.5	75.0	75.5	75.7	75.6	76.0	76.9	77.6	79.2	80.0	79.2	79.6	79.2	79.9	80.0	79.0	78.4	78.0	77.5	77.2	77.3	77.4	77.4	77.0	77.7	80.4	75.0
" 5.....	77.1	76.9	76.5	76.3	76.1	76.2	77.2	78.9	79.7	80.9	80.3	81.3	80.7	80.4	80.1	79.6	79.3	77.9	77.5	77.0	77.1	77.0	76.9	77.0	78.2	81.3	76.0
" 6.....	76.4	76.0	75.6	75.3	75.3	75.9	77.1	79.1	80.2	81.3	81.0	81.0	81.0	80.8	80.0	79.2	78.6	77.8	77.6	77.3	77.3	77.0	76.6	76.5	78.1	81.3	75.2
" 7.....	76.3	76.0	76.0	76.2	76.2	76.5	77.5	78.6	79.0	79.2	79.3	79.8	78.9	78.8	78.3	78.1	77.9	77.3	77.0	77.1	77.2	76.9	76.7	76.6	77.6	79.8	76.0
" 8.....	76.6	76.5	76.0	75.9	75.7	75.8	76.8	78.1	78.8	80.7	80.0	80.2	79.5	79.3	78.8	78.4	77.9	77.5	77.0	77.1	77.1	76.7	76.9	76.8	77.7	80.7	75.6
" 9.....	76.8	77.0	76.8	76.9	76.9	77.0	77.5	79.0	79.4	80.5	79.8	80.1	79.3	79.4	79.5	79.2	78.7	78.0	77.8	77.5	77.3	77.3	77.2	77.3	78.2	80.5	76.8
" 10.....	77.2	77.1	77.0	76.9	76.4	76.4	77.3	78.9	80.8	82.0	82.2	83.5	83.3	85.2	84.9	84.3	83.9	80.3	78.9	78.6	78.5	78.0	78.2	77.7	79.9	85.6	76.0
" 11.....	77.7	77.0	76.7	76.5	76.5	76.3	78.0	79.3	80.9	82.0	83.9	84.3	84.9	86.0	85.6	85.2	83.1	81.7	81.3	81.3	81.3	81.1	81.0	80.9	80.9	86.1	76.2
" 12.....	79.1	79.2	79.0	78.8	78.5	78.8	79.3	79.4	78.1	77.9	80.3	81.7	81.8	81.8	80.9	80.5	79.3	76.7	78.6	74.3	72.6	73.3	73.7	72.4	78.2	81.8	72.1
" 13.....	72.4	72.5	71.8	71.1	70.7	70.1	71.0	71.9	72.1	73.8	74.4	76.3	77.7	77.1	78.1	77.0	76.8	75.8	75.7	75.3	73.5	73.0	72.0	71.5	73.8	78.3	69.8
" 14.....	71.1	71.5	71.3	71.1	71.0	70.5	71.2	74.2	73.3	75.3	76.2	77.5	78.8	78.6	78.0	78.0	77.0	76.5	76.4	75.6	76.0	76.2	76.3	76.1	74.9	78.8	70.4
" 15.....	75.8	75.6	75.5	75.4	75.2	75.0	75.3	75.9	77.0	77.1	77.7	77.9	78.1	77.6	77.1	77.1	76.3	76.2	76.1	76.1	76.2	76.1	75.9	75.9	76.3	78.2	75.0
" 16.....	75.8	75.7	75.2	75.0	74.9	75.1	75.8	75.9	76.8	77.7	78.0	78.2	78.8	80.0	80.4	79.3	79.1	77.4	77.0	76.8	76.9	77.2	77.2	76.9	77.1	80.5	74.9
" 17.....	76.7	76.4	76.1	75.7	75.4	75.4	76.0	76.4	77.5	78.8	79.0	80.6	82.1	82.4	82.1	80.7	79.5	77.0	76.5	76.4	76.4	76.4	75.9	76.0	77.7	82.6	75.4
" 18.....	76.3	76.2	76.3	76.4	76.7	75.1	76.7	77.1	77.0	77.7	77.7	78.8	79.0	79.3	79.1	78.8	77.6	77.1	76.7	76.7	76.6	76.8	76.8	76.8	77.2	80.4	75.1
" 19.....	76.5	76.0	75.7	75.8	75.8	75.6	76.4	77.9	78.8	81.4	82.1	81.1	81.8	80.3	80.1	79.9	79.1	77.2	76.6	76.5	76.5	75.9	76.3	76.1	77.9	82.1	75.4
" 20.....	75.7	75.6	75.7	75.7	75.1	75.7	75.9	77.0	78.8	80.0	80.5	82.5	84.2	83.3	83.1	80.9	80.8	79.0	78.3	77.6	76.5	76.4	75.8	75.5	78.3	84.6	75.0
" 21.....	75.3	74.8	74.5	75.3	74.8	75.2	76.5	79.3	79.0	80.9	83.4	82.9	83.4	83.2	83.6	82.9	81.2	79.5	79.0	79.0	79.3	79.1	78.2	77.4	79.1	83.9	74.3
" 22.....	77.2	76.7	76.5	75.6	75.6	75.4	75.4	75.8	74.9	76.3	76.4	76.4	76.8	77.0	76.7	76.4	76.0	75.8	75.6	75.6	75.4	75.3	75.2	76.0	77.4	74.8	
" 23.....	75.2	74.9	74.8	74.4	73.9	74.0	74.3	74.8	75.2	76.8	76.3	76.9	77.0	77.8	78.2	78.2	76.9	76.5	76.3	76.3	76.3	76.3	76.0	75.6	76.0	78.3	73.4
" 24.....	75.6	75.3	75.2	75.0	74.8	74.5	75.2	75.8	76.9	78.1	77.5	77.3	77.3	77.9	78.0	78.2	76.7	76.0	75.6	75.2	75.2	74.8	76.1	78.2	74.5		
" 25.....	74.4	74.4	73.9	73.7	73.6	73.3	74.5	76.6	78.1	79.8	80.8	81.7	81.2	79.3	79.1	79.9	78.1	77.0	76.9	76.3	76.0	75.8	76.6	76.4	77.0	81.7	73.3
" 26.....	76.4	76.6	76.4	76.2	76.3	76.2	76.0	76.9	77.3	77.9	77.8	78.7	78.2	78.3	78.8	78.5	78.0	77.3	77.3	77.3	77.3	77.3	77.4	77.5	77.3	79.6	75.8
" 27.....	75.6	75.7	76.3	75.4	76.2	77.3	77.7	77.4	78.0	78.9	78.5	78.2	79.1	78.9	78.6	77.9	77.3	76.6	76.7	76.8	76.9	76.8	76.6	76.5	77.2	79.1	74.9
" 28.....	76.4	76.4	76.5	76.1	76.1	75.9	76.6	78.1	79.0	79.1	78.9	79.9	79.7	79.6	79.1	77.9	77.5	76.7	76.4	76.2	76.1	76.0	75.8	75.4	77.3	79.9	75.4
" 29.....	74.7	75.2	75.0	74.6	75.4	75.7	75.3	77.0	78.3	80.0	81.2	81.7	81.4	80.7	80.1	79.8	77.3	75.8	74.1	73.2	72.0	71.0	70.1	69.7	76.2	81.8	69.6
" 30.....	68.4	68.2	67.2	66.9	66.5	65.8	66.1	68.8	69.3	70.8	72.2	73.9	73.2	74.8	74.0	73.4	72.3	71.0	70.1	69.2	69.0	67.7	67.2	66.0	69.7	75.0	65.7
" 31.....	64.3	63.9	63.4	62.5	61.4	60.9	61.9	63.6	64.7	66.9	68.1	69.3	69.5	70.1	70.3	70.3	69.8	68.2	67.7	66.7	65.3	64.8	64.0	66.1	70.6	60.8	
Hourly Means,	75.4	75.3	75.0	74.8	74.7	74.7	75.3	76.5	77.2	78.3	78.7	79.3	79.5	79.5	79.3	78.8	78.0	76.9	76.5	76.2	76.0	75.8	75.6	75.3	76.8	80.2	73.9

TABLE III.

TEMPERATURE OF EVAPORATION AND RADIATION, FOR THE MONTH OF OCTOBER, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.	Sun.	Rad.	
1,.....	71.5	70.9	70.1	69.7	69.7	69.6	69.9	69.5	69.3	68.5	69.2	69.7	69.8	70.5	70.6	71.2	71.1	70.9	71.5	71.7	71.8	71.2	71.4	70.5	136.6	73.7		
2,.....	70.6	70.3	70.5	70.7	70.0	68.7	69.1	68.5	69.0	69.6	70.2	69.6	70.4	69.6	69.5	69.2	69.4	69.5	70.1	70.4	70.6	70.8	71.2	70.9	69.9	143.9	73.8	
3,.....	70.8	70.8	70.8	71.0	70.7	70.7	70.5	70.9	70.0	70.2	70.7	70.6	70.2	70.2	70.1	70.8	70.7	70.6	70.9	71.2	71.1	70.5	71.1	70.9	70.7	112.5	72.2	
4,.....	70.6	70.0	70.6	70.6	70.9	70.6	71.3	71.5	71.8	72.6	72.8	72.9	72.9	72.7	72.3	72.4	72.6	72.9	73.0	72.9	72.7	73.1	72.8	72.2	120.0	70.2		
5,.....	72.8	73.0	72.8	72.0	72.6	72.0	72.6	73.5	73.3	71.7	71.9	70.7	70.8	71.2	71.6	70.1	70.2	71.4	70.5	71.1	71.3	71.1	70.5	69.9	71.6	142.9	72.3	
6,.....	69.5	68.7	68.9	69.3	68.4	67.7	68.0	67.3	67.4	67.6	66.2	66.4	67.4	67.3	67.7	68.5	70.7	70.3	70.7	70.7	71.3	71.6	71.3	71.1	68.9	138.4	67.4	
7,.....	70.8	70.1	69.5	68.6	68.0	67.3	66.7	67.3	66.1	66.9	67.4	70.2	69.8	70.0	69.6	69.8	69.8	69.8	69.8	69.6	69.6	70.4	70.1	70.6	69.1	137.2	77.4	
8,.....	70.5	68.4	68.7	67.9	67.9	67.2	66.6	67.4	67.5	69.8	70.4	70.3	69.8	69.5	70.4	70.3	70.6	70.2	70.6	71.3	71.6	71.6	71.7	71.8	69.7	138.3	71.5	
9,.....	71.7	71.7	71.6	71.0	70.9	70.8	70.6	71.7	72.2	71.6	72.7	71.8	72.6	72.8	72.9	72.9	73.1	73.1	73.6	73.6	73.9	73.9	73.9	72.4	137.7	72.9		
10,.....	73.6	73.5	73.5	73.6	73.1	72.9	73.8	74.2	75.1	74.5	74.7	75.1	74.2	76.8	76.2	75.8	75.7	74.5	74.3	73.7	74.3	74.7	74.7	74.7	74.5	141.6	72.1	
11,.....	74.4	73.1	73.3	73.7	73.8	73.7	74.5	74.9	74.0	74.8	76.0	75.6	73.9	76.2	76.7	76.8	76.5	75.3	74.3	72.9	71.1	71.4	72.2	72.9	74.3	142.0	70.9	
12,.....	73.4	74.0	74.2	74.4	74.3	74.4	75.2	75.3	75.5	75.9	75.6	75.6	76.0	76.2	76.1	75.5	75.2	74.1	74.6	72.6	70.7	67.8	67.7	66.5	73.8	143.1	69.6	
13,.....	65.7	65.6	65.6	65.2	65.3	65.4	63.9	64.2	64.4	65.5	65.2	66.9	67.3	67.1	67.5	68.7	69.2	69.9	70.3	67.4	65.5	65.0	64.3	63.7	66.2	142.0	68.3	
14,.....	63.7	64.3	64.3	64.1	64.1	63.1	63.8	65.2	64.6	65.6	65.7	66.7	67.6	68.5	68.6	69.4	68.5	69.8	70.5	70.4	70.5	70.6	69.6	69.8	67.0	144.1	70.2	
15,.....	69.5	69.7	69.4	69.0	68.7	67.2	67.5	67.4	68.0	68.2	68.9	69.0	69.4	69.7	70.2	70.6	69.8	69.6	69.8	70.4	70.9	70.7	70.4	70.3	69.3	137.8	73.9	
16,.....	69.6	69.9	69.9	69.5	69.4	69.1	69.1	69.5	69.8	70.1	70.4	70.5	71.4	71.6	71.7	72.2	72.4	72.5	72.8	72.7	73.1	73.6	73.4	73.3	71.1	143.1	72.3	
17,.....	72.9	72.3	71.7	71.2	71.0	70.7	70.6	70.5	70.9	70.8	71.6	72.2	73.5	73.4	72.7	72.1	73.1	72.6	72.8	73.0	73.0	73.0	72.6	72.1	136.9	74.2		
18,.....	72.6	72.7	72.8	72.1	72.1	71.3	71.9	72.5	73.2	73.6	73.4	74.1	74.4	74.5	73.5	73.8	73.7	73.8	73.5	73.5	73.7	73.7	73.8	73.8	73.2	136.4	71.2	
19,.....	73.5	73.1	73.0	72.9	72.7	72.3	73.1	73.6	73.7	74.8	73.8	74.5	74.9	74.5	73.8	73.6	73.2	72.9	72.9	72.8	73.0	72.7	72.6	72.7	73.4	140.9	71.6	
20,.....	72.8	72.7	72.7	72.5	72.0	72.2	72.8	73.5	73.6	74.3	74.4	75.4	75.4	75.6	73.7	74.5	74.7	75.1	73.6	73.6	73.8	73.6	73.1	73.5	73.3	147.0	71.3	
21,.....	73.5	73.0	72.4	72.7	72.8	72.7	73.3	74.4	73.5	73.6	73.9	74.7	76.1	75.4	76.2	75.6	75.6	75.3	74.4	74.5	74.1	74.6	74.2	73.7	74.2	146.1	68.3	
22,.....	73.2	72.4	72.1	71.7	71.7	71.3	70.9	70.6	70.7	70.5	70.6	70.2	69.6	69.7	70.1	70.8	70.6	70.5	70.5	70.6	70.8	71.0	70.4	70.0	69.8	70.8	136.4	70.9
23,.....	69.4	69.6	68.8	68.5	69.2	69.1	68.5	68.6	68.3	69.6	68.3	68.7	68.6	69.2	69.8	69.8	69.8	69.8	70.0	70.3	70.5	71.1	71.3	71.5	71.3	69.6	142.6	71.5
24,.....	71.2	70.9	70.8	70.8	70.3	69.9	70.4	70.6	70.9	70.8	71.4	72.0	72.4	72.1	72.4	71.7	71.8	71.6	71.4	71.7	71.8	72.0	72.2	72.1	71.4	138.5	72.0	
25,.....	72.1	71.4	71.5	71.6	71.2	71.2	72.2	72.3	72.2	72.9	72.2	72.0	73.8	73.9	74.5	73.8	72.8	72.1	71.6	71.1	71.3	71.3	71.7	72.4	72.2	137.9	71.4	
26,.....	72.7	73.0	73.3	73.2	73.1	73.2	73.3	73.6	73.5	73.4	74.3	73.8	73.8	73.7	74.0	73.8	73.3	73.5	73.7	74.0	74.0	73.8	73.9	74.0	73.5	143.2	71.5	
27,.....	73.3	72.7	73.4	72.5	73.2	74.1	74.2	74.5	74.6	74.3	74.6	74.3	74.8	74.6	74.4	73.7	73.8	73.8	73.7	73.9	74.2	74.1	73.8	73.9	73.9	133.2	71.9	
28,.....	73.7	73.4	73.2	73.3	73.1	73.1	73.2	73.9	74.3	73.4	73.9	74.5	74.5	74.7	74.4	74.1	73.7	73.1	73.3	73.6	73.5	73.1	73.7	73.7	136.3	73.1		
29,.....	72.0	71.9	71.8	71.7	71.2	71.3	69.1	69.6	69.4	70.0	70.2	70.3	70.5	69.1	68.7	68.6	66.8	64.8	*64.3	*63.8	*63.3	62.7	62.5	62.1	68.2	144.4	66.0	
30,.....	61.1	61.5	60.1	60.3	*60.4	*60.5	*60.6	60.7	61.2	62.1	63.1	64.2	63.4	64.4	63.2	62.5	62.3	60.7	60.5	61.0	59.5	59.4	58.8	61.3	136.3	62.1		
31,.....	57.8	57.1	56.5	56.6	55.4	55.4	55.3	56.0	56.3	57.3	57.7	58.5	58.0	57.8	57.4	57.5	57.1	55.6	55.8	55.4	54.8	55.4	55.4	56.5	139.6	60.8		
H hourly Means,	70.7	70.4	70.2	70.1	69.9	69.6	69.8	70.1	70.2	70.5	70.6	71.0	71.3	71.3	71.4	71.3	71.2	70.9	70.9	70.8	70.8	70.6	70.6	70.4	70.6	138.5	70.9	

* Interpolated.

TABLE IV.

TABLE IV.
MEAN HOURLY AND DAILY RELATIVE HUMIDITY AND TENSION OF AQUEOUS VAPOUR
FOR THE MONTH OF OCTOBER, 1886.

Hour.	Hourly Mean.		Date.	Daily Mean.	
	Humidity.	Tension.		Humidity.	Tension.
1 a	78	0.696	Oct. 1,.....	68	0.651
2 "	77	0.686	" 2,.....	67	0.630
3 "	78	0.682	" 3,.....	72	0.667
4 "	78	0.680	" 4,.....	75	0.717
5 "	78	0.678	" 5,.....	72	0.687
6 "	77	0.663	" 6,.....	61	0.584
7 "	75	0.662	" 7,.....	63	0.598
8 "	71	0.657	" 8,.....	65	0.620
9 "	69	0.652	" 9,.....	74	0.719
10 "	66	0.648	" 10,.....	76	0.782
11 "	66	0.647	" 11,.....	72	0.760
Noon.	65	0.655	" 12,.....	80	0.777
1 p	65	0.664	" 13,.....	65	0.543
2 "	65	0.664	" 14,.....	64	0.557
3 "	66	0.671	" 15,.....	69	0.623
4 "	68	0.673	" 16,.....	73	0.682
5 "	70	0.680	" 17,.....	75	0.713
6 "	73	0.682	" 18,.....	82	0.765
7 "	75	0.688	" 19,.....	80	0.764
8 "	75	0.688	" 20,.....	79	0.766
9 "	76	0.691	" 21,.....	78	0.781
10 "	76	0.686	" 22,.....	76	0.685
11 "	77	0.689	" 23,.....	71	0.639
Midt.	77	0.686	" 24,.....	78	0.712
			" 25,.....	78	0.727
			" 26,.....	83	0.776
			" 27,.....	85	0.794
			" 28,.....	84	0.784
			" 29,.....	64	0.584
			" 30,.....	59	0.432
			" 31,.....	52	0.331
Mean,	73	0.673	Mean,.....	72	0.673

TABLE V.
DURATION OF SUNSHINE.

TABLE VI.
RAINFALL FOR THE MONTH OF OCTOBER, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Sums.
Oct. 1,
" 2,
" 3,
" 4,
" 5,
" 6,
" 7,
" 8,
" 9,
" 10,
" 11,
" 12,	0·045	0·075	...	...	...	...	0·025	...	...	1·075	1·015	0·005	...	2·240
" 13,	0·005	...	...	...	...	...	...	0·005
" 14,	0·020
" 15,
" 16,
" 17,
" 18,	0·005	...	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·010
" 19,
" 20,
" 21,
" 22,	0·080	...	...	...	...	...	...	...	...	...	...	...	...	0·085
" 23,
" 24,
" 25,	0·030	...	...	0·010	...	...	...	...
" 26,	0·010	0·010	0·010	...	...	...	0·010	...	...	...	...	0·005	...	0·075
" 27,	0·010	...	...	...	0·115	0·030	0·050	...	...	...	...	0·170	...	...	...	0·005	...	...	...	...	...	...	...	...	0·380
" 28,
" 29,
" 30,
" 31,
Sums,.....	0·010	...	0·005	0·115	0·035	0·060	0·090	0·010	0·215	0·075	...	0·005	...	...	...	...	0·055	0·005	0·010	1·095	1·015	0·005	0·005	0·005	2·815

TABLE VII.

DIRECTION AND VELOCITY OF THE WIND FOR THE MONTH OF OCTOBER, 1886.

DATE.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Sums.	Means.																								
	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.																																
Oct. 1.....	7	23	6	25	6	24	5	24	6	21	5	24	5	27	5	27	7	28	8	26	8	23	9	22	10	22	8	22	7	20	7	17	7	21	7	23	7	26	567	23.6										
" 2.....	7	26	7	23	7	22	7	24	7	23	6	23	6	19	7	17	9	19	10	23	10	17	10	22	8	16	8	16	7	13	6	16	7	18	7	20	7	20	476	19.8										
" 3.....	7	22	7	22	6	25	5	19	5	18	6	19	5	13	5	14	7	14	8	18	8	17	7	13	7	11	9	12	7	9	7	7	8	10	4	6	6	5	3	5	6	1	304	12.7						
" 4.....	5	2	5	3	6	6	7	4	7	4	7	6	6	8	7	10	5	7	5	9	10	10	12	8	10	9	10	6	10	2	0	0	1	10	5	9	6	9	7	9	6	147	6.1							
" 5.....	9	4	10	5	10	4	...	1	...	0	7	4	7	5	9	10	9	11	9	13	10	19	10	19	9	24	9	25	9	23	9	20	9	13	7	13	8	8	9	7	7	6	6	8	10	273	11.4			
" 6.....	9	7	7	3	7	3	7	4	9	5	8	7	9	10	7	14	8	18	8	19	7	17	8	17	9	19	10	22	9	19	9	19	8	21	8	16	8	13	8	12	7	10	6	10	6	10	312	13.0		
" 7.....	6	9	7	10	6	9	6	12	6	13	6	17	7	18	5	21	7	24	7	23	7	25	7	22	8	21	10	24	10	22	9	20	8	19	7	13	7	13	7	16	7	17	7	14	6	11	416	17.3		
" 8.....	5	9	6	11	5	10	6	10	6	11	6	10	6	13	6	16	8	18	9	19	10	21	10	22	10	21	10	20	10	21	9	21	7	13	7	14	6	13	12	7	16	7	18	373	15.5					
" 9.....	7	20	6	19	6	13	6	13	6	11	6	11	7	14	7	13	8	19	7	17	9	21	10	22	10	26	9	27	9	22	9	21	8	20	8	17	9	13	8	13	8	9	8	10	388	16.2				
" 10.....	8	11	8	8	7	8	5	8	4	8	2	8	2	17	3	22	6	24	9	24	10	24	9	20	7	24	9	25	5	17	4	16	6	28	6	9	4	10	4	11	4	11	2	134	5.6					
" 11.....	11	4	11	3	11	5	...	1	...	0	...	0	31	5	24	7	23	7	24	9	24	10	24	7	26	7	27	6	17	4	16	8	16	3	16	3	8	5	9	7	10	9	11	8	129	5.4				
" 12.....	11	5	10	9	9	8	9	5	7	7	7	9	6	8	-9	11	9	15	6	13	9	20	10	20	10	17	9	20	9	21	9	19	9	17	10	9	9	20	32	20	1	22	32	34	1	24	1	25	378	15.7
" 13.....	1	28	1	26	2	25	32	26	1	26	1	25	32	23	32	25	32	32	32	32	32	32	32	20	1	14	4	13	4	13	6	15	6	13	7	15	5	13	3	15	32	15	32	22	1	16	1	16	479	20.0
" 14.....	1	19	1	17	1	14	1	18	32	12	32	15	32	9	4	16	2	14	4	24	4	22	4	21	5	20	7	19	6	19	7	22	7	25	7	25	8	24	7	23	7	26	7	34	7	35	508	21.2		
" 15.....	7	38	7	37	7	36	7	31	6	32	7	32	6	31	6	31	6	22	7	28	7	26	6	28	7	28	7	27	7	28	7	24	7	22	6	25	7	25	7	31	7	30	7	33	692	28.8				
" 16.....	7	35	7	30	6	26	6	27	7	26	7	25	7	26	7	24	7	19	6	20	8	20	9	22	9	20	10	15	10	18	9	20	9	17	8	23	8	21	7	11	7	8	8	19	8	24	9	25	521	21.7
" 17.....	8	19	7	21	7	23	7	24	7	26	7	24	7	25	7	29	5	25	8	25	9	25	9	24	8	22	7	23	8	20	10	19	9	19	8	21	8	12	7	15	7	17	7	15	515	21.5				
" 18.....	7	19	8	18	8	17	8	18	7	17	8	17	7	10	8	19	7	18	7	20	7	16	7	16	8	18	8	14	8	12	8	11	9	9	6	9	5	9	9	10	190	15.3								
" 19.....	9	5	9	4	9	6	9	2	...	0	...	0	...	1	9	6	9	8	10	7	10	9	9	12	9	12	8	13	8	15	8	16	9	14	9	11	9	9	10	9	9	9	9	366	15.3					
" 20.....	9	8	9	5	9	4	7	4	7	2	8	4	11	3	...	1	7	2	7	5	8	11	9	6	19	6	23	6	23	4	7	4	8	5	11	4	...	1	11	2	11	3	11	3	11	98	4.1			
" 21.....	0	...	0	...	0	11	3	...	1	...	0	...	0	11	2	22	4	25	9	24	7	25	9	24	9	25	7	25	3	25	4	7	2	8	10	8	17	8	22	7	26	8	29	183	7.6					
" 22.....	7	27	7	27	7	28	7	28	7	30	7	30	7	34	7	33	7	30	7	31	7	29	7	28	7	28	8	24	8	25	7	22	7	22	8	26	8	32	7	22	8	26	7	28	652	27.2				
" 23.....	7	25	7	27	7	25	7	28	7	26	8	25	7	29	7	27	7	25	8	24	8	22	8	16	9	12	8	16	8	14	7	11	8	12	8	12	8	19	7	12	7	14	7	16	492	20.5				
" 24.....	7	14	6	17	6	17	6	19	6	16	5	17	5	15	6	18	8	20	8	22	9	21	10	20	9	19	9	18	9	13	9	14	9	11	9	9	8	9	9	9	6	351	14.6							
" 25.....	9	2	9	2	...	0	9	2	...	0	...	1	9	4	9	3	9	4	27	6	26	6	13	8	8	8	14	8	13	11	1	18	9	12	10	10	8	10	8	11	7	11	9	9	9	9	6	351	14.6	
" 26.....	10	11	9	17	9	18	8	15	7	15	7	15	7	20	7	17	7	21	6	20	9	23	9	23	7	18	7	18	8	17	9	19	8	20	8	19	8	23	8	26	8	25	8	25	477	19.9				
" 27.....	9	22	8	15	9	20	8	17	9	14	8	23	8	22	8	23	9	17	10	20	7	19	7	19	7	18	7	18	7	14	7	15	8	15	8	14	9	15	8	15	417	17.4								
" 28.....	8	15	8	14	8	12	8	10	8	11	7	10	7	11	8	11	8	14	10	16	9	20	9	20	9	18	8	19	9	17	8	15	8	14	9	14	9	15	8	15	417	17.4								
" 29.....	1	30	2	30	2	...	0	...	1	1	8	2	6	1	8	2	11	2	12	1	9	32	9	5	9	6	13	6	12	4	13	1	15	1	18	1	17	1	13	1	10	233	9.7							
" 30.....	1	6	1	7	32	12	32	11	32	10	32	12	32	16	32	14	32	13	1	8	6	5	4	9	1	11	2	9	2	11	32	12	1	14	1	15	3	13	1	22	1	17	1	13	293	12.2				
" 31.....	31	11	32	16	1	12	31	7	31	12	24	4	30	4	31	9	1	15	32	14	32	22	32	17	1	17	2	15	2	13	1	9	2	7	2	13	2	13	1	16	1	19	1	15	2	5	294	12.3		
Sums,.....	...	447	...	443	...	433	...	412	...	397	...	417	...	425	...	479	...	486	...	522	...	561	...	546	...	534	...	517	...	510	...	478	...	463	...	428	...	417	...	398	...	407	...	470	...	464	...	447	11101	462.6
Hourly Means,....	...	14.4	...	14.3	...	14.0	...	13.3	...	12.8	...	13.5	...	13.7	...	15.5	...	15.7	...	16.8	...	18.1	...	17.6	...	17.2	...	16.7	...	16.5	...	15.4	...	14.9	...	13.8	...	13.5	...	12.8	...	13.1	...	15.2	...	15.0	...	14.4	358.1	14.9

TABLE VIII.

MEAN HOURLY COMPONENTS AND MEAN DIRECTION OF THE WIND, FOR OCTOBER, 1886.

Hour.	Components (miles per hour).						Direction.
	N	E	S	W	+ N-S	+ E-W	
1 a.	2.4	12.0	0.3	0.0	+2.1	+12.0	E 10° N
2 "	3.1	11.6	0.2	0.0	2.8	11.6	E 14° N
3 "	3.5	11.4	0.2	0.0	3.4	11.4	E 17° N
4 "	3.9	10.4	0.1	0.0	3.8	10.4	E 20° N
5 "	3.5	10.1	0.0	0.0	3.5	10.1	E 19° N
6 "	3.8	10.6	0.0	0.1	3.8	10.5	E 20° N
7 "	4.0	10.9	0.1	0.0	4.6	12.3	E 21° N
8 "	4.7	12.3	0.0	0.3	4.1	11.9	E 19° N
9 "	4.2	12.2	0.1	0.7	2.5	12.9	E 11° N
10 "	3.1	13.6	0.5	0.9	1.6	13.8	E 7° N
11 "	2.4	14.8	0.8	1.1	1.1	12.8	E 5° N
Noon.	2.5	13.9	1.5	1.0	0.6	12.9	E 3° N
1 p.	2.0	13.9	1.4	1.0	0.2	13.9	E 1° N
2 "	1.1	14.7	0.9	0.9	0.0	13.4	E
3 "	1.3	14.3	1.3	0.8	0.2	13.2	E 1° N
4 "	1.3	13.6	1.1	0.4	0.7	13.1	E 3° N
5 "	1.3	13.3	0.6	0.0	0.5	11.8	E 2° N
6 "	1.4	11.8	1.0	0.0	1.7	11.5	E 8° N
7 "	2.1	11.5	0.4	0.1	2.4	10.0	E 13° N
8 "	2.7	10.1	0.3	0.0	2.7	10.5	E 14° N
9 "	2.9	10.5	0.2	0.0	3.4	11.5	E 16° N
10 "	3.6	11.5	0.3	0.0	2.4	12.2	E 11° N
11 "	2.8	12.2	0.5	0.0	+2.0	+11.9	E 10° N
Midt.	2.5	11.9	0.5	0.0			
Mean,.....	2.8	12.2	0.5	0.3	+2.2	+11.9	E 11° N

TABLE IX.

DIRECTION AND FORCE OF THE WIND AT VICTORIA PEAK, AND SEA DISTURBANCE.

DATE.	4 a.			10 a.			4 p.			10 p.		
	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.	Sea.
Oct.	1886.	...	...	4	E	5	6	4	4	E	5	4
"	1,.....	...	...	5	E	5	3	3	3	NE	4	4
"	2,.....	...	...	4	NE	4	3	3	2	NE	4	4
"	3,.....	...	...	3	E	3	1	4	3	E	5	6
"	4,.....	...	...	1	E	5	3	4	2	E	6	6
"	5,.....	...	...	3	E	6	4	5	4	E	4	4
"	6,.....	...	...	4	E	5	4	5	4	E	4	4
"	7,.....	...	...	4	E	5	4	5	4	E	4	4
"	8,.....	...	...	4	E	5	5	4	2	SE	4	4
"	9,.....	...	...	1	E	3	0	3	2	SW	4	4
"	10,.....	...	...	1	S	2	1	3	3	E	4	4
"	11,.....	...	...	3	E	4	3	5	5	NE	6	6
"	12,.....	...	...	5	NE	6	4	6	5	E	7	7
"	13,.....	...	...	3	ENE	6	4	6	5	E	5	4
"	14,.....	...	...	5	E	7	5	5	4	E	4	4
"	15,.....	...	...	5	E	6	5	5	3	E	4	4
"	16,.....	...	...	5	E	6	5	5	3	E	4	4
"	17,.....	...	...	4	E	4	3	4	3	E	3	3
"	18,.....	...	...	2	E	3	2	2	0	E	6	6
"	19,.....	...	...	1	ESE	2	1	3	3	ENE	6	6
"	20,.....	...	...	0	E	2	0	N	5	E	6	5
"	21,.....	...	...	4	E	6	6	E	5	E	5	4
"	22,.....	...	...	5	E	6	5	E	3	E	4	4
"	23,.....	...	...	4	E	4	3	E	3	E	5	5
"	24,.....	...	...	0	SE	3	0	SSE	3	E	4	4
"	25,.....	...	...	2	E	5	3	E	5	E	5	5
"	26,.....	...	...	3	ESE	4	4	ESE	4	ENE	3	3
"	27,.....	...	...	2	ESE	3	3	E	3	NE	4	4
"	28,.....	...	...	0	NNE	3	2	NNE	4	NNE	4	4
"	29,.....	...	...	3	NE	5	3	NNE	5	NE	4	4
"	30,.....	...	...	3	NNE	5	3	NE	5	NE	4	4
"	31,.....	...	...	3								
Mean,.....	...	...	3.0	E 5° N	4.5	3.2	E 2° N	4.2	3.0	E 7° N	4.7	

TABLE X.
VICTORIA PEAK.

DATE.	BAROMETER.			TEMPERATURE.							
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	Sun.	Max.	Min.	Rad.	
1886.	ins.	ins.	ins.	°	°	°	°	°	°	°	°
1,.....	28.191	28.151	28.118	71.2	73.5	70.0	130.6	74.9	69.0	66.2	
2,.....	.142	.086	.085	72.8	73.0	70.0	142.2	75.8	69.8	66.2	
3,.....	.133	.096	.110	70.6	70.6	69.8	103.3	75.3	69.7	66.6	
4,.....	.160	.111	.123	71.6	72.4	71.2	114.3	75.1	69.2	66.4	
5,.....	.170	.123	.103	74.0	76.2	72.0	142.2	76.3	69.5	66.6	
6,.....	.170	.140	.152	73.8	73.7	68.0	133.8	76.8	68.0	64.6	
7,.....	.183	.111	.108	72.0	71.9	68.0	130.6	75.1	68.0	68.2	
8,.....	.137	.073	.099	70.8	73.0	68.8	132.9	74.3	67.2	64.2	
9,.....	.128	.026	.042	72.7	74.8	70.8	134.8	74.9	68.5	66.2	
10,.....	.041	27.958	27.982	73.2	74.6	72.6	135.9	77.7	68.5	67.2	
11,.....	27.997	27.945	27.989	73.8	77.8	74.2	139.0	79.7	68.7	68.2	
12,.....	28.076	28.026	28.042	73.7	74.8	72.2	137.0	78.8	69.1	69.2	
13,.....	.145	.110	.169	68.6	70.0	67.2	127.3	74.7	64.1	61.3	
14,.....	.171	.156	.191	66.0	69.4	68.2	136.1	70.1	62.1	62.0	
15,.....	.218	.172	.196	68.8	69.4	68.5	125.3	72.3	67.1	64.2	
16,.....	.191	.152	.150	69.2	74.4	68.4	131.7	74.9	67.1	66.2	
17,.....	.175	.138	.177	71.2	74.4	70.6	131.7	74.9	68.4	67.2	
18,.....	.216	.162	.191	70.4	73.4	69.6	116.5	74.3	69.6	66.2	
19,.....	.197	.165	.185	72.5	74.7	70.7	135.5	75.1	69.6	67.2	
20,.....	.216	.138	.112	72.4	74.4	72.6	131.7	76.5	70.1	67.2	
21,.....	.187	.127	.125	74.8	77.6	74.8	142.2	78.5	69.3	68.2	
22,.....	.205	.178	.205	67.6	69.0	67.2	124.9	74.8	67.0	64.2	
23,.....	.265	.240	.234	68.7	70.6	68.6	132.7	73.1	66.1	65.2	
24,.....	.268	.201	.218	71.0	73.0	70.6	133.8	74.1	67.1	66.2	
25,.....	.151	.049	.075	72.7	73.8	71.0	144.3	75.3	67.1	63.6	
26,.....	.120	.061	.110	70.4	71.6	69.0	122.2	73.3	68.8	67.2	
27,.....	.186	.163	.190	71.5	72.0	69.0	137.0	74.5	68.8	67.2	
28,.....	.237	.193	.234	72.8	74.5	71.5	135.9	75.1	68.8	68.2	
29,.....	.263	.246	.261	72.6	68.8	65.2	134.8	73.6	65.0	56.2	
30,.....	.311	.261	.297	66.0	68.4	62.6	134.4	69.7	62.1	51.2	
31,.....	.329	.278	.292	63.4	64.4	60.6	125.3	65.7	58.5	55.2	
Mean,.....	28.180	28.180	28.147	71.0	72.6	69.5	131.6	74.7	67.5	64.8	

TABLE XI.
HUMIDITY AT THE OBSERVATORY AND AT VICTORIA PEAK.

DATE.	RELATIVE HUMIDITY.						TENSION OF AQUEOUS VAPOUR.					
	OBSERVATORY.			VICTORIA PEAK.			OBSERVATORY.			VICTORIA PEAK.		
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.
1886.	57	69	74	79	81	87	0.560	0.667	0.701	0.603	0.672	0.640
1,.....	60	63	71	79	76	83	.596	.601	.668	.641	.617	.605
2,.....	61	71	77	86	85	84	.615	.667	.680	.647	.610	.614
3,.....	69	71	79	89	82	82	.711	.704	.742	.693	.653	.625
4,.....	62	60	73	88	76	79	.654	.609	.683	.742	.680	.622
5,.....	46	55	75	67	79	82	.493	.555	.703	.561	.659	.568
6,.....	50	64	71	67	74	87	.496	.618	.657	.524	.581	.602
7,.....	56	65	77	78	75	92	.583	.634	.707	.587	.609	.655
8,.....	62	73	83	85	81	93	.656	.725	.780	.682	.697	.702
9,.....	69	66	85	93	89	93	.754	.778	.816	.755	.769	.748
10,.....	70	66	60	91	82	92	.767	.809	.640	.763	.735	.778
11,.....	91	78	74	94	90	93	.869	.816	.608	.781	.775	.738
12,.....	62	64	63	76	78	80	.518	.592	.512	.533	.570	.538
13,.....	57	63	75	87	80	91	.502	.605	.675	.556	.578	.627
14,.....	61	71	75	82	85	90	.572	.663	.680	.578	.616	.630
15,.....	67	70	84	87	77	95	.635	.696	.781	.628	.657	.660
16,.....	66	64	84	86	79	94	.648	.673	.767	.661	.679	.705
17,.....	82	78	86	97	90	95	.775	.768	.791	.723	.745	.688
18,.....	73	73	85	92	82	94	.775	.745	.762	.734	.706	.703
19,.....	75	74	85	94	90	85	.773	.778	.772	.750	.772	.680
20,.....	70	70	80	86	85	88	.732	.788	.797	.744	.812	.767
21,.....	80	74	77	94	92	91	.692	.672	.678	.635	.652	.605
22,.....	68	63	77	88	79	81	.628	.617	.701	.621	.597	.567
23,.....	69	72	85	88	79	79	.657	.691	.743	.663	.638	.597
24,.....	70	74	79	81	89	74	.718	.753	.708	.649	.714	.558
25,.....	80	80	84	96	95	87	.768	.780	.788	.715	.731	.617
26,.....	80	81	88	94	95	92	.787	.776	.812	.724	.748	.652
27,.....	75	83	88	93	77	81	.747	.793	.793	.753	.656	.621
28,.....	58	54	61	80	71	70	.600	.550	.460	.643	.498	.437
29,.....	58	51	59	75	68	72	.443	.421	.401	.482	.477	.409
30,.....	52	41	47	66	54	60	.344	.305	.292	.381	.329	.321
Mean,.....	66	68	76	85	81	85	0.647	0.672	0.687	0.650	0.656	0.622

TABLE XII.

AMOUNT AND CLASSIFICATION OF CLOUDS AND DIRECTION WHENCE COMING.

DATE.	1 a.			4 a.			7 a.			10 a.		
	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction
1886.												
Oct. 1,	3	cum.	ENE	5	cum.	ENE	4	cum.	ENE	1	c-str.	W
" 2,	4	cum.	ENE	8	cum.	ENE	10	c-str.	...	9	cum.	ENE
" 3,	7	cum.	...	10	str.	SW	10	str.	...	10	str.	SW
" 4,	10	str.	...	8	cum-nim.	NE	10	str-cum.	W	10	str.	W
" 5,	10	nim.	WSW	6	sm-cum.	W	8	cum-nim.	ENE	1	cum.	N
" 6,	4	cum.	ENE	9	cum.	E	0	cum.	WSW	0	cum.	WSW
" 7,	1	sm-cum.	E	7	cum.	E	0	cum.	W	0	cum.	W
" 8,	0	...	...	0	...	...	0	...	...	0	...	...
" 9,	1	c-cum.	N	2	cum.	ENE	7	cum.	ESE	1	c-cum.	N
" 10,	2	eum.	ENE	5	str-cum.	...	1	cum.	...	0	cum.	...
" 11,	1	c-cum.	SW	3	cum.	...	7	cum.	WNW	1	cum.	WNW
" 12,	6	e-cum.	W	5	R-cum.	NE	10	cum.	NE	9	cum.	NE
" 13,	9	cum.	E	NE	c-cum.	...	3	c-cum.	SW	9	cum.	SW
" 14,	10	cum-nim.	cum-nim.	ENE	cum.	ENE	10	sm-cum.	ENE	9	str-cum.	ENE
" 15,	10	str-cum.	str-cum.	ENE	cum.	ENE	10	str-cum.	ESE	10	str-cum.	ESE
" 16,	10	cum-nim.	cum-nim.	ENE	cum-nim.	ENE	6	cum-nim.	ENE	7	cum.	ENE
" 17,	8	cum.	E	10	cum-nim.	E	9	cum-nim.	E	1	R-cum.	E
" 18,	9	R-cum.	E	10	cum-nim.	E	10	R-cum.	E	10	cum-nim.	E
" 19,	6	cum.	SE	8	cum.	ESE	8	cum.	ESE	3	cum.	SE
" 20,	2	cum.	E	6	cum.	E	2	cum.	ESE	2	cum.	SE
" 21,	1	str.	...	0	...	...	0	cum.	...	2	cum.	...
" 22,	10	cum-nim.	ESE	10	nim.	E	9	cum-nim.	E	7	cum.	E
" 23,	10	nim.	E	10	cum-nim.	E	10	cum-nim.	E	0	cum.	E
" 24,	5	cum.	E	3	cum.	E	1	cum.	E	2	cum.	E
" 25,	0	...	...	1	cum.	E	0	cum.	...	2	cum.	...
" 26,	0	...	...	10	nim.	...	10	cum.	ESE	9	cum.	ESE
" 27,	9	nim.	SE	10	nim.	ESE	9	cum.	E	8	cum.	E
" 28,	1	cum.	ESE	3	cum.	ESE	4	cum.	ESE	2	cum.	ESE
" 29,	0	...	...	2	cum.	ESE	0	cum.	...	0	cum.	...
" 30,	8	cum.	NE	6	cum.	NE	4	cum.	NE	1	cum.	NE
" 31,	10	str-cum.	NNE	2	cum.	NNE	5	str-cum.	NNE	1	str-cum.	NNE
Mean,.....	5.4	...	...	6.3	...	...	5.7	...	...	4.4	...	...

TABLE XII.—Continued.

AMOUNT AND CLASSIFICATION OF CLOUDS AND DIRECTION WHENCE COMING.

DATE.	1 p.			4 p.			7 p.			10 p.			Daily and Monthly Means.
	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	
1886.													
1,.....	2	c-cum. cum. c-str. c-cum.	WSW ENE	1	cum.	NE	4	cum.	ENE	8	cum.	ENE	3.5
2,.....	9	R-cum. cum. str.	WSW	9	str-cum.	SW	10	cum.	SW	10	cum.	SW	8.6
3,.....	10	c-cum. cum. str.	ESE E W	10	nim.	...	10	str. cum.	...	10	str. cum.	...	9.6
4,.....	10	nim.	...	10	str.	W	10	str-cum.	WSW	10	str-cum.	W	9.7
5,.....	2	c-cum.	WSW	3	c. c-cum.	WNW	0	...	...	0	...	...	3.8
6,.....	0	...	...	0	...	...	0	...	...	1	sm-cum.	E	1.7
7,.....	2	cum.	E	0	...	...	0	...	...	1	cum.	E	1.4
8,.....	1	c-str.	W	2	c. c-str.	WNW	0	...	...	0	...	...	0.4
9,.....	3	c. cum.	NNW	0	...	...	0	...	...	1	cum.	ENE	1.9
10,.....	2	sm-cum.	NW	0	...	...	0	...	...	0	...	...	1.3
11,.....	2	cum.	NNW	1	cum.	NNE	0	...	...	2	sm-cum.	ENE	2.1
12,.....	7	c-cum. cum.	NE E	8	cum. R-cum. str.	NE ESE	10	cum-nim.	ENE	10	cum. cum-nim.	NE	8.1
13,.....	10	str-cum.	ENE	9	cum-nim.	ENE	10	nim.	NE	10	str-cum.	ENE	8.5
14,.....	9	R-cum. cum.	ESE ENE	10	cum-nim.	ENE	10	str. cum-nim.	ENE	10	cum. cum-nim.	ENE	9.5
15,.....	10	str-cum. cum.	ESE ENE	9	sm-cum. cum.	ESE ENE	1	cum.	E	10	R-cum.	E	8.7
16,.....	1	cum.	ENE	1	c.	NNW	0	...	...	10	cum-nim.	E	5.5
17,.....	0	...	...	0	...	...	0	...	...	1	sm-cum.	SSE	3.6
18,.....	8	cum.	E	9	sm-cum. cum.	E	0	...	...	2	cum.	SE	7.3
19,.....	3	cum.	E	0	...	...	0	...	...	0	...	...	3.5
20,.....	2	cum.	ESE	2	sm-cum. cum.	ESE	0	...	...	0	...	...	2.0
21,.....	2	cum.	E	0	...	...	3	cum.	E	4	cum.	E	1.5
22,.....	3	cum.	E	3	cum.	E	10	cum-nim.	E	10	nim.	E	8.1
23,.....	4	c-cum. cum.	SSE ENE	5	c-cum.	ESE	7	cum.	E	6	cum.	E	7.4
24,.....	0	...	...	0	...	...	0	...	...	0	...	...	1.1
25,.....	1	cum.	S	0	...	...	0	...	...	0	...	...	0.5
26,.....	9	cum. cum-nim.	S E	6	cum. cum.	S E	10	nim.	ESE	10	cum-nim.	E	8.0
27,.....	6	cum. cum-nim.	SSE ESE	9	cum. cum-nim.	S ESE	5	cum-nim.	ESE	4	cum-nim.	ESE	7.5
28,.....	1	cum.	ESE	1	cum.	ESE	0	...	...	0	...	...	1.5
29,.....	9	cum.	ESE	8	R-cum.	E	10	cum.	ENE	9	cum.	ENE	4.7
30,.....	1	cum.	NE	6	sm-cum.	SW	10	str-cum.	...	10	str-cum.	...	5.8
31,.....	0	...	...	0	...	...	0	...	...	0	...	...	2.2
Mean,.....	4.2	...	...	8.9	...	...	3.9	...	...	4.8	...	...	4.8

TABLE XIII.

RAINFALL AT DIFFERENT STATIONS.

DATE.	OBSERVATORY.		STONE CUTTERS' ISLAND.	VICTORIA PEAK.
	Amount.	Duration.	Amount.	Amount.
1886.	ins.	hrs.	ins.	ins.
Oct. 1,.....	...	...	...	...
" 2,.....	...	...	...	...
" 3,.....	...	3	...	...
" 4,.....	...	2	...	...
" 5,.....	...	...	...	...
" 6,.....	...	...	...	...
" 7,.....	...	...	...	...
" 8,.....	...	...	...	...
" 9,.....	...	...	...	...
" 10,.....	...	...	...	...
" 11,.....	0.120	2	0.45	...
" 12,.....	2.120	3	1.97	1.71
" 13,.....	0.005	1	...	...
" 14,.....	0.020	1	0.02	...
" 15,.....	...	...	...	...
" 16,.....	...	...	...	...
" 17,.....	0.010	1	...	...
" 18,.....	...	...	...	...
" 19,.....	...	...	...	...
" 20,.....	...	...	...	...
" 21,.....	0.080	3	0.07	...
" 22,.....	0.005	1	...	...
" 23,.....	...	...	...	...
" 24,.....	...	...	...	...
" 25,.....	0.030	2	...	...
" 26,.....	0.420	6	0.60	...
" 27,.....	0.005	1	...	...
" 28,.....	...	...	...	...
" 29,.....	...	...	...	...
" 30,.....	...	...	...	...
" 31,.....	...	...	...	...
Total,.....	2.815	26	3.11	1.71

W. DOBERCK,
Government Astronomer.

Hongkong Observatory, 26th November, 1886.

HONG KONG OBSERVATORY.

Weather Report for November, 1886.

In the *China Coast Meteorological Register*, based on information transmitted by the Great Northern and the Eastern Extension Telegraph Companies, which was daily published, is given a summary of the atmospheric circumstances in Luzon and along the Coast of China, and information concerning the weather in Nagasaki and Wladivostock. It contains also information concerning the first appearance and progress of typhoons.

Unusual visibility was noted on the 1st, the 12th, and the 26th.

It was hazy on the afternoon of the 9th, and on the mornings of the 26th, and 29th.

Dew fell on the evenings of the 25th, and 28th.

Lunar coronas were seen during the night of the 9th to 10th, and on the evening of the 15th.

The total distance traversed by, as well as the duration and average velocity of winds from different quarters were as follows :—

Direction.	Total Distance. Miles.	Duration. Hours.	Velocity. Miles per hour.
N	2167	161	13.5
NE	2009	152	13.2
E	6242	345	18.1
SE	481	36	13.4
S .....	...	...	...
SW	6	1	6.0
W	36	4	9.0
NW	54	8	6.7
Calm	11	13	0.8

TABLE I.

BAROMETRIC PRESSURE FOR THE MONTH OF NOVEMBER, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.
Nov. 1, ...	30.077	30.060	30.058	30.057	30.054	30.071	30.093	30.107	30.110	30.111	30.093	30.073	30.045	30.030	30.022	30.024	30.028	30.043	30.058	30.079	30.091	30.091	30.088	30.071	30.068
" 2, ...	.066	.045	.040	.037	.039	.053	.071	.090	.102	.096	.073	.050	.026	.018	30.014	30.018	.023	.031	.050	.076	.084	.083	.077	.067	.055
" 3, ...	.059	.052	.039	.036	.052	.068	.084	.099	.105	.106	.084	.058	.031	30.011	29.999	29.993	30.001	30.012	30.026	.043	.048	.043	.033	.019	.046
" 4, ...	.004	30.005	30.011	30.014	.030	.053	.073	.088	.092	.085	.068	.036	30.001	29.988	.977	.974	29.972	29.976	29.997	30.014	.016	.018	.018	.006	30.022
" 5, ...	30.003	29.997	29.997	29.993	.006	.015	.033	.040	.060	.053	.028	.003	29.969	.946	.929	.930	29.939	29.948	29.964	29.993	.005	.016	.016	.008	29.995
" 6, ...	29.991	29.976	29.983	29.991	.005	.031	.045	.063	.078	.078	.062	.046	30.016	29.997	29.985	29.991	30.008	30.024	30.036	30.053	.060	.068	.070	.070	30.030
" 7, ...	30.068	30.064	30.063	30.061	.070	.089	.119	.134	.144	.149	.136	.112	.077	30.049	30.043	30.050	.063	.069	.098	.110	.108	.106	.108	.109	.092
" 8, ...	.105	.098	.085	.077	.084	.106	.118	.142	.152	.142	.114	.087	30.060	30.033	30.020	30.025	30.029	30.037	30.051	30.060	.073	.081	.076	.070	.080
" 9, ...	30.063	30.049	30.039	30.026	30.018	30.034	.046	.055	.063	.059	30.044	30.014	29.977	29.948	29.941	29.949	29.963	29.981	29.985	30.001	30.008	30.012	30.002	30.009	
" 10, ...	29.987	29.977	29.967	29.956	29.974	29.990	.007	.007	.019	.007	29.992	29.963	.933	.906	.891	.891	.906	.928	.953	29.975	29.996	29.996	29.999	29.967	
" 11, ...	29.995	29.996	29.992	29.991	30.015	30.033	.056	.068	.072	.069	30.044	30.002	29.974	.946	.944	.944	.956	.970	29.992	30.007	30.029	30.028	30.037	30.036	30.008
" 12, ...	30.040	30.033	30.028	30.027	.032	.035	.054	.076	.091	.094	.076	.054	30.028	.995	.986	.981	29.981	29.987	30.006	.027	.044	.050	.050	.040	.084
" 13, ...	.032	.033	.027	.024	.028	.045	.065	.087	.099	.095	.072	.046	.024	29.997	.988	.987	30.000	30.013	.038	.048	.058	.064	.055	.047	.040
" 14, ...	.038	.025	.028	.030	.032	.047	.076	.090	.101	.107	.095	.072	30.045	30.019	.999	.991	30.000	30.016	30.030	.049	.053	.053	.055	.059	.046
" 15, ...	.049	30.040	30.011	30.047	.065	.082	.093	.097	.081	30.038	30.005	29.969	29.956	.947	.945	29.962	29.977	29.999	30.025	30.034	30.031	30.035	30.025		
" 16, ...	30.030	30.010	29.996	29.989	29.993	30.002	30.012	30.016	30.030	30.008	29.980	29.951	.910	.884	.871	.872	.879	.904	.921	29.983	29.959	29.931	29.915	29.896	29.953
" 17, ...	29.893	29.865	.862	.852	.850	29.860	29.873	29.886	29.893	29.877	.821	.787	.762	.732	.726	.720	.727	.742	.771	29.786	29.804	29.816	29.820	29.824	.815
" 18, ...	29.830	29.830	29.835	29.839	29.854	29.886	29.915	29.934	29.945	29.951	29.940	29.931	29.910	29.905	29.903	29.921	29.948	29.967	29.986	30.001	30.015	30.025	30.040	30.035	29.931
" 19, ...	30.029	30.025	30.042	30.051	30.064	30.086	30.105	30.121	30.134	30.133	30.114	30.093	30.062	30.047	30.039	30.047	30.051	30.062	30.073	.083	.092	.083	.073	.065	30.074
" 20, ...	.071	.071	.075	.073	.073	.083	.099	.117	.135	.136	.109	.075	30.041	30.014	30.005	30.003	30.004	.009	.038	.064	.077	.079	.075	.065	.066
" 21, ...	.057	.042	.026	.020	.026	.041	.060	.074	.087	.081	.059	.026	29.995	29.973	29.967	29.969	29.984	.006	.030	.057	.073	.085	.088	.087	.088
" 22, ...	.081	.067	.067	.068	.079	.101	.114	.135	.156	.153	.141	.115	30.083	30.063	30.059	30.066	30.072	.076	.093	.117	.138	.151	.148	.136	.103
" 23, ...	.121	.114	.114	.116	.128	.141	.160	.169	.183	.179	.164	.134	.111	.090	.084	.083	.092	.098	.117	.123	.134	.135	.130	.116	.126
" 24, ...	.109	.096	.095	.090	.101	.111	.132	.149	.166	.164	.142	.109	.071	30.043	30.025	30.025	30.029	.037	.056	.073	.087	.091	.092	.083	.091
" 25, ...	.062	.047	30.042	30.046	30.056	.073	.082	.094	.102	.098	.073	.049	30.018	29.998	29.993	29.993	29.999	30.002	30.014	30.025	.039	.049	30.043	30.032	30.043
" 26, ...	30.019	30.005	29.998	29.994	29.998	30.008	.028	.048	.054	.052	.039	.013	29.987	.955	.946	.945	.945	29.951	29.972	29.993	30.001	30.004	29.988	29.981	29.997
" 27, ...	29.978	29.967	.966	.981	.983	29.993	30.012	.022	.028	.042	30.026	30.012	.981	.961	.949	.940	.944	.952	.957	.972	29.984	29.988	.985	.974	.983
" 28, ...	.967	.957	.954	.951	.952	.956	29.978	.002	.015	.005	29.989	29.961	.942	.932	.920	.911	.915	.925	29.944	29.959	29.972	29.980	29.978	29.969	.960
" 29, ...	29.971	29.969	29.965	29.968	29.971	29.981	29.998	.011	.022	.014	29.997	29.978	.946	29.928	29.918	29.929	29.950	29.974	30.002	30.042	30.058	30.080	30.084	29.993	
" 30, ...	30.091	30.085	30.085	30.077	30.079	30.097	30.113	.125	.152	.145	30.134	30.110	.079	30.062	30.051	30.049	30.061	30.077	.095	.106	.119	.129	.136	.132	30.100
Hourly Means, f	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	30.080	30.020	30.017	30.016	30.023	30.038	30.057	30.071	30.083	30.079	30.058	30.032	30.002	29.981	29.971	29.972	29.981	29.993	30.012	30.029	30.041	30.045	30.044	30.037	30.026

TABLE II.

TEMPERATURE FOR THE MONTH OF NOVEMBER, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means	Max.	Min.
Nov. 1,.....	63.3	62.2	61.2	60.3	59.7	60.3	61.0	62.6	66.1	68.3	68.9	69.4	70.0	70.3	71.5	70.6	69.9	69.4	69.5	70.3	70.8	71.8	71.2	70.8	67.1	71.8	59.6
" 2,.....	70.4	70.1	70.0	69.8	69.2	69.1	69.0	69.9	70.2	70.9	72.1	72.1	71.9	72.3	72.2	72.0	71.8	71.9	72.0	72.0	72.1	72.1	72.0	71.8	71.1	72.3	69.0
" 3,.....	71.6	70.9	70.3	70.0	69.9	69.5	69.8	70.3	71.1	72.0	72.8	73.3	73.4	72.8	72.5	71.8	72.2	72.6	72.9	73.1	73.1	72.9	73.1	71.8	73.5	69.5	
" 4,.....	72.7	72.0	71.8	71.6	71.3	71.4	71.1	71.9	72.7	73.4	74.1	74.9	75.4	73.9	73.9	73.7	72.9	72.3	72.5	72.7	72.9	73.0	73.3	73.3	72.9	75.6	70.7
" 5,.....	72.8	72.3	72.0	71.8	71.2	71.0	71.1	71.8	72.0	73.1	74.1	74.2	73.2	74.0	73.0	72.9	72.2	71.8	72.1	72.1	72.0	72.3	72.4	72.7	72.4	74.2	70.5
" 6,.....	72.6	72.3	72.2	72.1	71.7	71.4	70.0	71.3	72.7	74.2	74.2	75.6	76.3	77.0	77.9	74.0	73.3	72.9	73.0	72.5	70.4	69.8	69.0	68.3	72.7	78.0	68.2
" 7,.....	67.4	66.8	66.1	66.2	65.9	66.0	66.5	67.6	69.7	70.8	72.1	74.4	74.2	74.4	73.7	73.6	73.2	73.3	73.1	71.8	71.5	70.4	69.4	67.5	70.2	74.5	65.7
" 8,.....	66.9	67.8	68.4	68.5	67.9	67.6	67.6	68.7	69.9	70.9	71.9	71.8	71.7	73.4	72.2	72.0	71.1	69.7	69.9	69.8	70.2	70.3	70.1	70.1	69.9	73.4	66.7
" 9,.....	69.7	69.4	68.6	68.4	68.5	67.8	68.0	69.1	70.4	72.0	72.9	74.0	74.0	74.1	74.9	72.6	71.4	70.2	69.9	68.8	68.7	69.1	69.0	69.0	70.4	74.9	67.4
" 10,.....	69.0	68.9	68.4	67.9	67.5	67.2	67.3	67.9	69.9	74.0	75.1	76.1	78.3	76.9	77.1	76.0	74.2	72.3	71.3	71.4	71.6	71.8	71.9	71.8	71.8	79.5	66.9
" 11,.....	69.6	69.1	67.9	67.1	66.9	67.3	67.2	68.1	70.2	71.9	73.2	73.7	74.3	74.1	73.0	72.2	71.3	70.8	71.0	70.7	70.5	70.5	70.5	68.4	70.4	74.3	66.7
" 12,.....	68.5	68.0	67.6	66.5	66.6	66.7	67.0	68.6	70.1	72.1	73.0	72.9	72.1	72.8	72.6	71.7	70.2	69.3	69.1	69.2	69.4	69.7	69.4	69.4	69.7	73.0	66.2
" 13,.....	69.2	68.6	67.8	66.7	66.3	67.0	67.7	69.6	70.7	71.7	72.8	73.1	71.9	71.8	71.4	69.9	70.1	69.5	69.7	70.1	69.9	70.1	69.8	69.5	69.8	73.1	66.2
" 14,.....	69.1	68.5	68.4	67.8	67.6	67.6	68.3	69.7	70.1	71.1	71.7	72.1	71.9	71.7	71.5	71.2	70.1	69.6	69.9	69.7	69.7	69.6	69.5	69.8	69.8	72.1	67.6
" 15,.....	69.7	69.4	69.9	68.6	67.9	67.2	67.4	69.5	71.8	72.0	72.9	73.6	74.8	74.8	74.0	74.8	73.0	72.2	72.1	70.8	69.8	68.7	68.1	67.4	70.8	74.8	66.8
" 16,.....	67.0	66.8	65.7	65.8	64.7	64.5	64.3	65.1	66.8	68.7	70.4	71.7	73.1	72.4	72.0	71.6	70.2	70.3	68.7	68.3	67.8	67.7	67.4	66.9	68.2	73.1	64.3
" 17,.....	66.5	65.6	65.4	65.3	65.3	65.0	64.8	66.0	67.8	69.5	71.8	72.3	73.4	74.4	74.5	73.9	72.5	70.8	69.8	69.4	68.7	69.5	68.3	67.7	69.1	74.5	64.4
" 18,.....	67.0	66.2	65.5	64.6	64.2	64.0	64.1	65.0	67.1	68.6	70.6	71.7	71.8	72.4	71.9	70.7	69.8	68.7	68.7	68.0	67.9	67.9	69.0	68.8	68.1	72.6	62.7
" 19,.....	68.2	67.6	67.2	66.2	65.3	65.1	64.9	65.7	66.3	67.6	67.8	68.0	68.0	68.0	68.0	67.7	67.0	67.0	67.1	67.0	66.7	66.6	66.5	66.3	66.9	68.8	64.6
" 20,.....	65.9	65.3	65.3	65.1	65.1	65.0	65.1	65.8	67.1	67.7	68.5	68.1	68.1	69.6	69.0	68.2	66.9	66.0	66.0	66.2	66.2	66.5	66.3	66.6	66.6	69.9	64.9
" 21,.....	66.7	66.9	66.9	67.1	67.0	67.3	66.9	69.0	70.7	71.8	72.5	75.1	74.4	72.5	71.1	70.8	69.3	68.9	68.9	68.6	68.2	67.7	67.2	66.9	69.3	75.2	66.6
" 22,.....	67.0	66.7	66.0	66.2	66.3	66.0	65.9	66.4	68.0	69.0	70.2	71.2	71.8	72.9	72.4	72.4	70.9	70.0	68.0	66.2	65.0	64.1	65.7	64.0	68.0	72.9	63.9
" 23,.....	64.1	63.3	62.6	61.7	61.1	60.7	61.0	63.9	65.6	66.8	68.9	68.2	68.1	68.0	67.4	67.1	66.0	65.6	65.0	64.3	63.9	63.6	62.8	64.7	68.9	60.6	
" 24,.....	62.8	62.8	62.4	62.5	62.5	62.4	62.9	64.5	65.8	66.1	66.2	66.2	65.9	65.1	65.5	65.7	65.5	64.9	64.9	65.2	65.1	65.1	65.0	64.9	64.6	66.5	62.4
" 25,.....	64.6	64.5	64.4	63.6	63.3	62.8	63.0	65.4	67.8	68.0	70.9	69.7	69.5	70.7	71.5	69.8	68.5	67.5	67.2	66.8	66.6	66.2	65.9	65.0	66.8	72.0	62.4
" 26,.....	65.6	66.0	65.0	64.7	64.5	64.7	65.3	68.0	70.6	70.7	69.9	71.7	72.1	72.8	70.9	70.2	69.6	68.7	68.6	68.2	67.9	67.4	67.4	68.2	72.3	64.2	
" 27,.....	67.0	66.9	65.4	65.2	66.4	66.7	66.9	67.7	67.8	68.4	69.1	68.2	68.7	69.1	68.7	68.3	67.4	67.0	67.5	67.6	67.9	67.9	67.6	67.5	69.1	64.7	
" 28,.....	67.4	67.3	67.4	67.2	67.0	67.3	67.8	68.8	69.3	70.2	70.9	71.5	71.3	72.5	72.7	73.3	72.7	70.6	70.0	68.8	68.1	67.7	67.4	67.4	69.4	73.3	67.0
" 29,.....	67.1	66.2	65.5	66.4	67.0	68.2	68.7	72.0	74.4	75.9	78.0	78.8	79.6	74.6	72.9	73.9	70.9	71.6	70.8	68.5	66.6	65.9	64.6	63.3	70.5	80.0	63.3
" 30,.....	62.9	62.1	61.8	61.3	59.2	59.3	58.6	59.9	61.6	62.5	64.0	65.6	65.5	65.4	66.6	65.3	63.4	62.5	61.5	60.4	60.2	59.8	58.6	58.1	61.9	66.6	58.1
.....
Hourly Means,.....	67.7	67.3	66.9	66.5	66.2	66.2	66.3	67.7	69.1	70.3	71.4	72.0	72.2	72.2	71.9	71.3	70.3	69.6	69.3	68.9	68.6	68.5	68.3	67.9	69.0	73.0	65.4

TABLE III.

TEMPERATURE OF EVAPORATION AND RADIATION, FOR THE MONTH OF NOVEMBER, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.	Sun.	Rad.	
Nov. 1,.....	55.2	54.0	53.1	52.9	52.7	53.9	53.5	54.8	57.4	58.9	59.4	59.3	59.8	60.5	60.8	60.7	61.2	61.2	62.2	61.9	63.0	62.8	63.3	63.3	58.6	132.1	53.8	
" 2,.....	62.9	63.4	63.2	62.7	62.4	62.8	62.6	63.2	62.5	62.8	63.3	63.4	63.0	63.5	62.2	63.6	64.1	64.6	64.7	64.9	64.7	64.4	64.0	63.7	63.4	130.9	65.8	
" 3,.....	64.8	64.1	64.0	63.9	63.6	63.6	62.4	62.5	62.2	63.2	61.9	63.2	63.3	62.9	64.3	63.6	63.7	64.4	65.3	65.9	66.3	66.6	66.9	66.8	64.1	130.8	66.2	
" 4,.....	66.9	66.4	65.9	65.2	65.6	64.8	64.4	63.5	63.6	64.5	65.2	65.4	66.2	66.7	65.6	65.5	65.6	65.9	66.3	66.8	67.2	67.4	67.9	67.5	65.8	132.4	68.5	
" 5,.....	67.2	66.6	66.6	66.2	65.5	63.8	64.2	64.4	65.2	65.6	66.8	66.9	66.1	65.5	64.8	65.9	65.3	65.2	64.9	65.3	66.1	66.6	66.6	66.9	65.8	138.3	68.8	
" 6,.....	67.2	66.2	66.2	65.8	64.8	64.0	64.1	63.4	64.5	64.5	64.6	64.4	64.7	65.3	65.8	66.5	66.3	65.9	66.4	63.1	62.5	61.6	60.6	60.1	64.5	142.2	64.6	
" 7,.....	60.1	60.3	59.6	59.2	59.2	59.2	59.3	59.7	60.6	60.6	61.4	62.6	62.5	62.6	62.1	62.4	62.3	61.7	62.1	60.4	60.6	60.6	60.4	61.9	60.9	135.4	61.4	
" 8,.....	60.6	60.2	61.3	60.9	59.9	59.7	59.5	60.2	60.7	61.5	61.7	62.7	62.5	63.2	62.9	63.2	62.3	62.9	62.9	63.2	63.5	63.3	63.5	64.0	61.9	130.6	62.4	
" 9,.....	63.6	63.0	62.9	62.4	61.8	61.8	61.2	61.5	61.4	60.7	59.3	61.4	60.8	60.8	62.5	61.3	60.8	61.0	61.6	62.5	62.5	62.5	62.3	60.3	61.7	132.9	60.4	
" 10,.....	57.8	57.9	57.0	56.8	56.9	57.2	57.8	58.8	60.3	61.4	60.9	62.3	63.5	63.2	64.2	65.3	64.1	65.0	65.6	66.9	67.2	67.5	67.2	66.9	62.2	134.3	59.5	
" 11,.....	64.8	63.5	61.0	60.0	59.6	60.0	59.6	59.8	60.9	62.0	62.6	62.9	64.1	64.2	64.3	64.0	64.2	64.0	64.5	64.8	65.3	65.6	65.8	63.3	62.9	131.6	61.0	
" 12,.....	63.2	61.5	60.1	59.4	59.5	59.4	60.1	60.5	61.1	61.8	62.4	62.5	61.6	62.7	63.9	64.1	64.0	64.0	64.1	64.2	64.4	64.4	64.7	65.0	62.4	130.6	62.6	
" 13,.....	64.6	63.5	62.3	60.3	60.1	61.0	60.4	61.5	62.5	62.6	62.6	63.2	61.7	62.1	61.9	63.1	63.6	63.4	63.8	64.5	64.7	65.5	64.8	64.2	62.8	131.9	62.1	
" 14,.....	63.6	63.8	63.3	63.0	62.8	61.9	61.7	63.1	62.0	62.5	62.1	61.5	62.2	61.8	62.4	63.1	62.7	63.2	63.6	64.1	64.1	64.3	64.3	64.3	63.0	129.7	63.8	
" 15,.....	64.3	63.9	63.4	63.6	60.6	60.0	59.3	59.5	60.6	60.7	60.3	61.4	61.1	61.3	60.7	60.4	58.7	58.6	58.4	58.4	57.7	57.1	56.6	56.9	60.1	134.2	61.7	
" 16,.....	56.8	55.8	55.7	57.0	55.3	54.9	55.8	55.4	56.1	57.4	58.3	58.6	59.8	58.7	58.4	58.1	56.6	56.9	59.2	59.9	60.1	60.1	60.5	60.4	57.7	131.7	61.6	
" 17,.....	57.8	55.0	54.1	54.4	54.8	54.2	53.8	54.5	55.6	56.3	57.6	57.6	57.2	57.4	57.4	56.5	55.2	58.4	57.6	57.4	55.6	53.3	53.1	54.4	55.8	137.7	58.0	
" 18,.....	53.0	53.7	52.8	52.6	52.1	51.6	50.5	51.4	52.7	53.5	54.4	54.7	55.2	55.1	55.7	58.1	57.4	57.7	57.5	58.3	57.9	59.0	60.5	60.0	55.2	130.8	55.0	
" 19,.....	59.5	58.1	57.3	56.7	57.1	56.4	55.9	56.7	56.8	56.7	55.6	57.7	57.6	58.1	58.3	58.2	58.5	58.7	59.2	59.6	59.8	59.3	59.4	59.4	57.9	128.8	58.3	
" 20,.....	58.6	58.1	57.9	57.0	57.4	57.6	57.4	56.7	57.4	57.3	58.3	58.6	58.8	59.4	59.8	59.2	59.1	59.6	60.8	61.3	62.2	62.2	62.3	59.0	129.7	63.2		
" 21,.....	62.5	62.2	62.1	62.0	61.4	60.8	60.0	61.0	59.6	60.6	62.1	64.4	63.8	62.8	63.6	62.9	62.6	62.6	62.9	62.9	63.1	63.3	63.8	64.1	62.3	138.3	62.7	
" 22,.....	63.8	63.3	62.6	56.5	56.0	*54.8	53.7	54.2	54.5	54.6	55.5	56.4	55.8	56.1	55.7	55.6	55.0	53.8	58.9	59.6	60.0	59.5	52.9	52.7	56.7	181.9	60.6	
" 23,.....	53.8	53.5	53.1	52.8	52.6	52.1	52.3	53.5	53.6	55.1	56.4	56.6	57.6	58.4	58.3	59.2	58.4	58.4	57.5	57.9	57.4	58.6	58.9	57.6	56.0	126.8	59.7	
" 24,.....	58.6	58.2	58.4	58.5	58.7	58.5	58.4	58.5	58.7	58.9	59.4	58.1	56.5	55.7	57.2	57.9	57.9	59.1	59.7	60.3	60.7	60.2	59.8	59.5	58.6	127.5	55.4	
" 25,.....	59.5	59.8	59.7	59.3	57.8	57.1	56.9	57.6	59.0	58.5	60.1	58.9	59.3	60.3	61.7	62.4	61.0	60.1	59.8	60.6	60.4	60.4	60.4	60.0	59.6	138.5	60.0	
" 26,.....	60.2	60.1	60.7	60.1	60.3	59.6	60.8	61.2	60.5	61.3	61.6	60.6	61.5	60.5	60.8	61.5	60.5	61.7	61.5	62.6	63.2	63.4	63.3	62.5	61.3	134.3	53.1	
" 27,.....	62.5	62.0	62.8	61.5	61.9	61.8	61.3	61.8	61.8	61.6	62.6	61.7	61.7	62.3	61.8	63.1	63.3	63.5	64.3	64.0	64.3	64.3	64.1	62.7	129.1	61.8		
" 28,.....	64.2	64.1	63.7	63.4	62.9	62.9	63.5	63.4	63.2	63.2	63.8	63.4	63.8	64.5	63.5	63.2	62.4	62.9	64.1	63.9	63.6	63.5	63.1	62.2	63.4	128.3	62.1	
" 29,.....	61.4	62.0	61.3	61.8	62.3	62.4	63.9	63.4	64.5	64.9	65.2	65.7	65.6	66.6	67.5	65.7	66.6	67.0	60.1	58.3	56.9	56.6	55.6	54.5	62.2	135.8	58.5	
" 30,.....	54.4	54.0	53.8	52.7	51.4	52.1	51.5	52.8	53.8	53.8	55.0	55.7	55.8	56.2	56.1	54.9	53.8	53.8	52.6	51.9	52.1	51.9	51.3	50.8	53.4	127.8	56.7	
Hourly Means,.....	61.1	60.6	60.2	59.6	59.2	59.0	58.9	59.3	59.8	60.2	60.6	61.0	61.1	61.3	61.4	61.7	61.7	61.3	61.2	61.7	61.8	61.9	61.9	61.6	61.3	60.7	132.5	61.0

* Interpolated.

TABLE IV.

TABLE IV
MEAN HOURLY AND DAILY RELATIVE HUMIDITY AND TENSION OF AQUEOUS VAPOUR
FOR THE MONTH OF NOVEMBER, 1886.

Hour.	Hourly Mean.		Date.	Daily Mean.	
	Humidity.	Tension.		Humidity.	Tension.
			1886.		
1 a	67	0.455	Nov. 1,.....	58	0.381
2 "	66	0.444	" 2,.....	63	0.482
3 "	65	0.437	" 3,.....	63	0.497
4 "	64	0.423	" 4,.....	67	0.541
5 "	64	0.415	" 5,.....	69	0.548
6 "	63	0.408	" 6,.....	61	0.499
7 "	62	0.403	" 7,.....	56	0.413
8 "	58	0.398	" 8,.....	61	0.448
9 "	55	0.395	" 9,.....	58	0.436
10 "	53	0.391	" 10,.....	56	0.433
11 "	51	0.390	" 11,.....	64	0.475
Noon.	50	0.394	" 12,.....	64	0.468
1 p	50	0.395	" 13,.....	66	0.480
2 "	50	0.401	" 14,.....	67	0.486
3 "	52	0.409	" 15,.....	50	0.378
4 "	56	0.426	" 16,.....	49	0.339
5 "	57	0.427	" 17,.....	38	0.271
6 "	59	0.433	" 18,.....	38	0.266
7 "	63	0.453	" 19,.....	55	0.362
8 "	65	0.462	" 20,.....	62	0.400
9 "	66	0.469	" 21,.....	65	0.470
10 "	67	0.470	" 22,.....	46	0.312
11 "	66	0.463	" 23,.....	54	0.335
Midt.	67	0.458	" 24,.....	68	0.414
			" 25,.....	63	0.416
			" 26,.....	65	0.452
			" 27,.....	75	0.507
			" 28,.....	70	0.505
			" 29,.....	60	0.450
			" 30,.....	53	0.297
		
Mean,	60	0.426	Mean,.....	59	0.425

TABLE V.
DURATION OF SUNSHINE.

TABLE VI.
RAINFALL FOR THE MONTH OF NOVEMBER, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Sums.
Nov. 1,
" 2,
" 3,
" 4,
" 5,
" 6,
" 7,
" 8,	0·005
" 9,
" 10,	0·010
" 11,	0·030
" 12,
" 13,
" 14,
" 15,
" 16,
" 17,
" 18,
" 19,
" 20,
" 21,
" 22,
" 23,
" 24,
" 25,
" 26,
" 27,	0·005
" 28,
" 29,
" 30,
Sums,.....	0·005	...	...	0·005	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·050

TABLE VII.

DIRECTION AND VELOCITY OF THE WIND FOR THE MONTH OF NOVEMBER, 1886.

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TABLE VIII.

MEAN HOURLY COMPONENTS AND MEAN DIRECTION OF THE WIND, FOR NOVEMBER, 1886.

Hour.	Components (miles per hour).						Direction.
	N	E	S	W	+N-S	+E-W	
1 a.	5.3	12.0	0.1	0.0	+5.2	+12.0	E 23° N
2 "	5.7	11.0	0.1	0.0	5.6	11.0	E 27° N
3 "	7.4	9.7	0.0	0.1	7.4	9.6	E 38° N
4 "	8.0	8.6	0.0	0.1	8.0	8.5	E 43° N
5 "	9.3	7.8	0.1	0.0	9.2	7.8	E 50° N
6 "	9.0	7.9	0.0	0.0	9.0	7.9	E 49° N
7 "	8.1	7.7	0.0	0.0	8.1	7.7	E 46° N
8 "	8.4	7.7	0.0	0.0	8.4	7.7	E 47° N
9 "	6.5	9.7	0.2	0.0	6.3	9.7	E 32° N
10 "	6.6	10.8	0.0	0.0	6.6	10.8	E 31° N
11 "	4.6	12.1	0.4	0.1	4.2	12.0	E 19° N
Noon.	3.8	14.1	1.4	0.2	2.5	13.9	E 10° N
1 p.	3.7	13.2	2.3	0.2	+1.4	13.0	E 6° N
2 "	3.1	11.9	3.2	0.1	-0.1	11.8	E
3 "	2.7	13.3	2.0	0.4	+0.7	12.9	E 3° N
4 "	2.9	12.8	1.0	0.5	1.9	12.3	E 9° N
5 "	2.7	12.0	0.3	0.3	2.3	11.7	E 11° N
6 "	2.3	11.4	0.0	0.2	2.3	11.2	E 12° N
7 "	2.4	11.6	0.0	0.1	2.4	11.4	E 12° N
8 "	2.8	10.8	0.0	0.1	2.8	10.7	E 15° N
9 "	3.3	11.6	0.1	0.0	3.2	11.6	E 15° N
10 "	3.9	12.4	0.1	0.0	3.8	12.4	E 17° N
11 "	3.6	13.2	0.0	0.0	3.5	13.2	E 15° N
Midt.	4.6	13.0	0.1	0.0	+4.5	+13.0	E 19° N
Mean,.....	5.0	11.1	0.5	0.1	+4.5	+11.0	E 23° N

TABLE IX.

DIRECTION AND FORCE OF THE WIND AT VICTORIA PEAK, AND SEA DISTURBANCE.

DATE.	4 a.			10 a.			4 p.			10 p.		
	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.	Sea.
1886.												
Nov.	1,.....	...	2	NE	3	3	E	4	3	ENE	5	3
"	2,.....	...	4	E	5	4	E	5	4	E	4	4
"	3,.....	...	3	E	6	4	E	4	4	E	3	4
"	4,.....	...	4	E	5	5	E	3	5	E	3	4
"	5,.....	...	5	ENE	5	5	E	4	3	E	5	4
"	6,.....	...	4	ENE	5	3	ENE	4	3	ENE	4	2
"	7,.....	...	2	ENE	5	2	NNE	4	2	ENE	3	3
"	8,.....	...	2	E	4	4	E	3	4	E	4	5
"	9,.....	...	4	ENE	4	4	ENE	3	3	N	3	1
"	10,.....	...	1	ENE	4	1	N	3	3	NE	3	3
"	11,.....	...	3	ENE	4	3	E	4	2	E	5	3
"	12,.....	...	2	E	5	2	E	4	3	E	4	3
"	13,.....	...	1	E	4	3	E	4	4	E	5	4
"	14,.....	...	4	E	5	4	E	4	4	E	5	3
"	15,.....	...	2	NE	6	3	NE	6	2	NE	5	2
"	16,.....	...	2	NE	4	2	NE	3	1	NNE	4	1
"	17,.....	...	1	NNE	3	2	NW	5	0	NW	6	1
"	18,.....	...	3	NE	5	3	E	4	2	E	4	2
"	19,.....	...	4	E	5	4	E	5	4	E	6	3
"	20,.....	...	4	E	4	4	E	4	3	E	5	3
"	21,.....	...	2	NE	3	2	NE	4	2	NE	5	2
"	22,.....	...	3	NE	6	2	NE	6	1	ENE	4	3
"	23,.....	...	2	E	5	3	E	5	3	E	5	4
"	24,.....	...	3	E	5	4	E	5	4	E	5	4
"	25,.....	...	3	E	4	3	E	3	3	E	4	1
"	26,.....	...	1	E	5	2	E	6	2	E	6	1
"	27,.....	...	4	E	6	4	E	5	3	E	6	4
"	28,.....	...	3	E	6	2	E	5	2	E	6	1
"	29,.....	...	1	NE	4	3	ENE	3	3	NE	5	2
"	30,.....	...	2	ENE	4	3	NE	5	2	NE	6	2

Mean,.....	...	...	2.7	E 16° N	4.6	3.1	E 16° N	4.2	2.8	E 17° N	4.6	2.8

TABLE X.
VICTORIA PEAK.

DATE.	BAROMETER.			TEMPERATURE.							
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	Sun.	Max.	Min.	Rad.	
1886.	ins.	ins.	ins.	°	°	°	°	°	°	°	
NOV. 1,.....	28.326	28.277	28.274	60.8	63.2	61.0	126.5	66.9	57.8	55.2	
" 2,.....	.327	.278	.261	64.2	63.5	61.6	124.2	66.1	56.5	57.2	
" 3,.....	.329	.269	.292	64.6	65.6	61.5	125.3	66.9	57.1	46.2	
" 4,.....	.323	.239	.269	64.7	66.6	61.6	126.5	69.6	61.5	60.2	
" 5,.....	.298	.212	.264	64.6	66.6	63.6	127.5	67.9	61.6	61.2	
" 6,.....	.320	.272	.309	65.6	68.6	61.5	132.3	70.3	61.1	56.0	
" 7,.....	.372	.319	.349	63.8	67.5	64.4	124.6	69.1	60.1	55.3	
" 8,.....	.371	.283	.320	62.7	65.6	58.8	123.1	69.3	58.6	55.2	
" 9,.....	.288	.219	.249	63.5	67.7	63.0	126.4	68.3	58.8	57.2	
" 10,.....	.254	.181	.204	64.6	69.6	64.6	126.4	69.6	58.7	58.2	
" 11,.....	.306	.219	.266	63.6	66.5	60.6	126.0	70.1	60.1	55.2	
" 12,.....	.315	.249	.285	63.0	65.6	62.6	123.1	66.5	59.4	56.2	
" 13,.....	.323	.252	.280	64.5	64.2	60.0	121.6	65.7	60.0	57.3	
" 14,.....	.339	.266	.289	63.6	64.5	61.6	124.2	65.5	60.0	57.2	
" 15,.....	.307	.210	.227	62.6	66.6	62.4	119.8	67.9	59.1	57.2	
" 16,.....	.253	.128	.151	61.4	65.6	61.2	122.0	68.3	58.1	55.2	
" 17,.....	.113	.002	.067	61.8	65.7	58.6	127.5	67.6	58.1	57.2	
" 18,.....	.178	.172	.258	61.6	64.6	60.6	122.0	66.1	56.3	57.4	
" 19,.....	.349	.280	.276	60.4	60.4	56.8	125.3	63.1	54.3	54.4	
" 20,.....	.355	.275	.302	59.6	63.2	59.2	125.3	63.5	56.1	55.2	
" 21,.....	.309	.247	.324	63.6	66.6	58.6	134.0	68.8	58.6	53.0	
" 22,.....	.367	.305	.367	61.0	64.7	57.6	119.8	64.7	57.6	51.2	
" 23,.....	.387	.336	.309	59.0	62.0	57.8	109.9	63.3	52.1	50.2	
" 24,.....	.364	.258	.246	58.0	58.4	55.8	120.9	62.3	49.1	49.2	
" 25,.....	.316	.222	.264	60.0	62.4	60.0	124.2	63.0	49.1	48.2	
" 26,.....	.286	.202	.232	64.5	63.0	60.6	132.7	65.6	59.3	54.2	
" 27,.....	.263	.198	.212	59.6	61.7	59.6	127.5	63.1	57.1	56.2	
" 28,.....	.229	.191	.240	62.7	64.6	64.0	123.1	66.1	58.9	57.2	
" 29,.....	.271	.214	.287	66.5	68.0	61.0	125.3	70.1	56.1	48.2	
" 30,.....	.343	.296	.324	57.7	60.6	54.4	118.9	61.3	48.3	48.2	
...	
Mean,.....	28.306	28.236	28.267	62.5	64.8	60.5	124.5	66.6	57.3	54.7	

TABLE XI.
HUMIDITY AT THE OBSERVATORY AND AT VICTORIA PEAK.

DATE. 1886.	RELATIVE HUMIDITY.						TENSION OF AQUEOUS VAPOUR.					
	OBSERVATORY.			VICTORIA PEAK.			OBSERVATORY.			VICTORIA PEAK.		
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.
NOV. 1,.....	54	53	58	69	71	75	0.374	0.400	0.453	0.374	0.407	0.400
" 2,.....	62	60	63	76	78	82	.465	.478	.503	.461	.460	.451
" 3,.....	57	58	70	73	74	89	.447	.466	.567	.447	.468	.482
" 4,.....	58	62	74	77	78	88	.489	.520	.597	.473	.513	.481
" 5,.....	65	67	73	88	82	93	.531	.545	.577	.538	.538	.550
" 6,.....	56	65	60	78	70	80	.479	.551	.440	.493	.488	.440
" 7,.....	53	50	54	76	66	73	.395	.416	.400	.454	.444	.443
" 8,.....	55	58	66	77	70	91	.422	.454	.490	.440	.444	.457
" 9,.....	49	49	67	76	61	76	.381	.393	.479	.445	.412	.434
" 10,.....	45	54	79	58	66	72	.377	.482	.617	.355	.479	.444
" 11,.....	54	61	76	77	74	71	.425	.488	.566	.456	.482	.376
" 12,.....	53	64	74	76	73	92	.416	.498	.535	.434	.462	.518
" 13,.....	58	67	77	79	74	91	.448	.489	.568	.476	.449	.471
" 14,.....	59	62	74	79	73	88	.453	.471	.533	.462	.446	.481
" 15,.....	49	38	45	68	57	62	.381	.335	.314	.386	.371	.354
" 16,.....	46	40	62	65	58	65	.323	.306	.420	.350	.372	.346
" 17,.....	39	26	27	62	57	64	.280	.228	.194	.345	.364	.319
" 18,.....	30	43	56	46	48	78	.211	.318	.382	.255	.299	.411
" 19,.....	47	53	63	66	66	79	.317	.361	.409	.350	.350	.368
" 20,.....	48	58	77	70	68	78	.333	.397	.504	.361	.395	.394
" 21,.....	49	65	77	62	73	59	.381	.493	.524	.367	.481	.292
" 22,.....	34	28	75	51	44	58	.237	.221	.449	.278	.273	.278
" 23,.....	42	60	73	58	65	73	.281	.400	.428	.293	.359	.355
" 24,.....	63	60	74	81	76	89	.404	.378	.459	.391	.375	.396
" 25,.....	53	63	69	74	72	74	.366	.466	.449	.383	.406	.383
" 26,.....	55	58	79	63	67	93	.418	.432	.532	.383	.388	.494
" 27,.....	66	73	81	87	81	81	.459	.510	.556	.446	.450	.417
" 28,.....	66	55	78	82	72	71	.488	.447	.531	.468	.444	.424
" 29,.....	53	62	53	74	82	64	.470	.524	.336	.482	.564	.343
" 30,.....	53	47	55	71	67	45	.301	.296	.284	.335	.354	.196
...
Mean,	52	55	67	71	69	76	0.392	0.425	0.470	0.406	0.425	0.407

TABLE XII.

AMOUNT AND CLASSIFICATION OF CLOUDS AND DIRECTION WHENCE COMING.

DATE.	1 a.			4 a.			7 a.			10 a.		
	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction
1886.												
Nov. 1,	0	...	...	1	cum.	NE	9	sm-cum.	E	8	cum.	E
" 2,	*5	cum.	ENE	3	cum.	ENE	1	cum.	E	1	cum.	E
" 3,	1	cum.	E	5	cum.	E	0	...	...	0	...	...
" 4,	5	cum.	NE	7	cum.	ENE	1	cum.	ENE	0	...	...
" 5,	7	cum.	NE	5	cum.	NE	6	cum.	NE	3	cum.	ENE
" 6,	5	cum.	ENE	9	cum.	ENE	7	cum.	W	3	cum.	WSW
" 7,	6	cum.	E	7	cum.	ENE	2	sm-cum.	W	1	cum.	ENE
" 8,	9	R-cum.	E	10	cum-nim.	E	3	sm-cum.	SSW	2	c-str.	W
" 9,	4	cum.	NE	3	cum.	ENE	0	...	...	1	cum.	...
" 10,	8	cum.	W	5	sm-cum.	W	5	sm-cum.	W	1	str.	...
" 11,	10	cum-nim.	NE	8	cum.	N	4	cum.	N	1	cum.	W
" 12,	6	cum.	NE	0	...	...	0	...	...	0	...	...
" 13,	8	cum.	NE	4	cum.	NE	0	...	...	1	cum.	ENE
" 14,	1	cum.	ENE	3	cum.	E	0	...	...	1	cum.	ENE
" 15,	7	cum.	NE	8	cum.	N	4	cum.	SW	3	cum.	N
" 16,	9	cum.	...	9	sm-cum.	SW	3	sm-cum.	SW	5	c-str.	S
" 17,	5	cum.	...	7	cum.	NW	4	cum.	WSW	3	c-str.	S
" 18,	7	cum.	NW	0	...	...	0	...	...	0	...	...
" 19,	8	cum.	ENE	6	cum.	NE	0	...	...	0	...	...
" 20,	10	cum-nim.	...	10	cum.	...	10	cum.	SSE	8	sm-cum.	S
" 21,	7	cum.	ENE	10	sm-cum.	NW	9	sm-cum.	NW	1	cum.	...
" 22,	5	cum.	...	1	cum.	...	0	...	...	0	...	...
" 23,	0	...	...	2	sm-cum.	W	2	cum.	W	0	...	...
" 24,	0	...	...	0	...	...	1	cum.	E	2	cum.	E
" 25,	1	cum.	ENE	1	cum.	S	0	...	...	4	cum.	SSE
" 26,	1	cum.	N	0	...	...	0	...	...	2	cum.	SSE
" 27,	1	cum.	E	10	cum-nim.	E	10	cum.	E	10	cum-nim.	SSW
" 28,	1	cum.	E	0	...	...	4	cum.	W	2	sm-cum.	E
" 29,	6	cum.	E	10	cum.	NE	8	cum.	NNE	0	...	...
" 30,	10	cum.	NN	8	cum.	NN	2	c-str.	WSW	4	cum.	E
.....
Mean,.....	5.1	...	...	5.1	...	...	3.2	...	...	2.2	...	...

* Interpolated.

TABLE XII,—Continued.

AMOUNT AND CLASSIFICATION OF CLOUDS AND DIRECTION WHENCE COMING.

DATE.	1 p.			4 p.			7 p.			10 p.			Daily and Monthly Means.
	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	
1886.													
Ov. 1,.....	1	c-cum.	W	0	...	...	7	cum.	E	8	cum.	E	4.2
" 2,.....	0	...	...	0	...	...	1	cum.	E	2	cum.	E	1.6
" 3,.....	0	...	...	0	...	...	0	...	...	9	cum.	ENE	1.9
" 4,.....	0	...	...	0	...	...	1	cum.	NE	3	cum.	ENE	2.1
" 5,.....	1	cum.	ENE	0	...	...	0	...	...	0	...	...	2.8
" 6,.....	4	c. cum.	WSW	4	c-str.	WSW	5	sm-cum.	W	8	sm-cum. cum.	ENE	5.6
" 7,.....	5	c-cum. cum.	ENE	10	c-cum. cum.	W E	10	R-cum.	ENE	10	R-cum.	E	6.4
" 8,.....	2	c-str. cum.	W NNE	1	c-str.	WNW	0	...	...	1	cum.	NE	3.5
" 9,.....	4	c-str.	W	4	c-str.	W	5	c-str.	...	8	c-cum.	W	8.6
" 10,.....	0	...	...	2	c-str.	W	5	c-cum.	W	9	c-cum. cum-nim.	NE	4.4
" 11,.....	0	...	...	1	cum.	N	9	sm-cum.	NNE	8	cum-nim.	ENE	5.1
" 12,.....	0	...	...	0	...	...	1	cum.	E	1	cum.	ENE	1.0
" 13,.....	3	c-str.	...	1	c-str.	...	1	cum.	E	7	cum.	ENE	3.1
" 14,.....	0	...	...	1	c-str.	...	0	...	...	1	cum.	E	0.9
" 15,.....	3	c-str.	SW	5	c-str.	SW	6	c-str. cum.	...	9	c-str. c-cum. c-str. c-cum. str.	WSW	5.6
" 16,.....	7	c-str.	S	9	c-str.	S	0	...	...	9	c-str. c-cum. c-str. c-cum. str.	W ...	6.4
" 17,.....	3	c-str. sm-cum.	S W	2	c-str. c-cum.	SSW WSW	1	str.	...	0	...	...	3.1
" 18,.....	0	...	...	0	...	...	0	...	...	3	cum.	ESE	1.2
" 19,.....	0	...	...	5	c-cum. sm-cum. cum.	SSW W SW	10	cum.	SSW	10	cum-nim.	...	4.9
" 20,.....	0	...	...	0	...	...	0	...	...	1	cum.	ENE	4.9
" 21,.....	4	c-cum.	W	10	cum.	W	10	cum.	...	0	...	...	6.4
" 22,.....	1	c-str.	...	1	c-str.	...	0	...	...	0	...	...	1.0
" 23,.....	0	...	...	0	...	...	0	...	...	0	...	...	0.5
" 24,.....	0	...	...	0	...	...	1	cum.	E	1	cum.	E	0.6
" 25,.....	9	cum.	ESE	9	cum.	NNE	0	...	...	0	...	...	3.0
" 26,.....	8	cum.	SE	5	cum.	SSE	1	cum.	SSE	2	cum.	E	2.4
" 27,.....	9	cum. cum-nim.	WSW E	9	cum. cum.	WSW ESE	2	cum.	ESE	10	cum.	E	7.6
" 28,.....	2	c-str.	...	0	...	...	0	...	...	0	...	...	1.1
" 29,.....	0	...	...	0	...	...	0	...	...	10	cum.	ENE	4.3
" 30,.....	6	c-str. cum.	NNE	2	c-str. cum.	W ...	5	c-str.	W	10	cum.	NNE	5.9
.....
Mean,.....	2.4	...	...	2.7	...	...	2.7	...	...	4.7	...	...	3.5

TABLE XIII.

RAINFALL AT DIFFERENT STATIONS.

DATE.	OBSERVATORY.		STONE CUTTERS' ISLAND.	VICTORIA PEAK.
	Amount.	Duration.		
1886.	ins.	hrs.	ins.	ins.
Nov. 1,.....
" 2,
" 3,
" 4,
" 5,
" 6,
" 7,	0.005	1	...	...
" 8,
" 9,
" 10,	0.015	1	...	...
" 11,	0.025	1	...	...
" 12,
" 13,
" 14,
" 15,
" 16,
" 17,
" 18,
" 19,
" 20,
" 21,
" 22,
" 23,
" 24,
" 25,
" 26,	0.005	1	...	...
" 27,
" 28,
" 29,
" 30,
...
Total,.....	0.050	4	...	...

W. DOBERCK,
Government Astronomer.

Hongkong Observatory, 13th December, 1886.

HONGKONG OBSERVATORY.

Weather Report for December, 1886.

In the *China Coast Meteorological Register*, based on information transmitted by the Great Northern and the Eastern Extension Telegraph Companies, which was daily published, is given a summary of the atmospheric circumstances in Luzon and along the Coast of China, and information concerning the weather in Nagasaki and Wladivostock.

Unusual visibility was noted on the 15th, 16th, and 24th.

Dew fell on the early morning of the 18th, and on the evening of the 31st.

It was misty on the early mornings of the 19th, 27th, and 29th, and slight fog was noted on the early evening of the 31st.

The total distance traversed by, as well as the duration and average velocity of winds from different quarters were as follows :—

Direction.	Total Distance. Miles.	Duration. Hours.	Velocity. Miles per hour.
N	3564	220	16.2
NE	1824	143	12.8
E	4629	293	15.8
SE	364	35	10.4
S	10	2	5.0
SW	39	8	4.9
W	127	20	6.3
NW	18	4	4.5
Calm	15	19	0.8

TABLE I.
BAROMETRIC PRESSURE FOR THE MONTH OF DECEMBER, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.
Dec. 1, ...	30.126	30.114	30.110	30.111	30.113	30.149	30.173	30.189	30.191	30.175	30.148	30.111	30.085	30.072	30.070	30.084	30.101	30.113	30.127	30.142	30.146	30.143	30.142	30.128	
" 2, ...	.134	.120	.119	.128	.134	.150	.168	.179	.181	.180	.161	.139	.117	.101	.096	.086	.103	.119	.138	.153	.158	.161	.160	.163	.139
" 3, ...	.167	.150	.150	.147	.149	.162	.174	.191	.202	.199	.188	.165	.125	.108	.091	.089	.097	.112	.134	.144	.154	.151	.138	.126	.146
" 4, ...	.125	.122	.113	.111	.111	.132	.153	.165	.169	.159	.144	.112	30.072	30.039	30.017	30.012	30.024	30.032	30.050	30.058	30.054	.073	.067	30.059	.091
" 5, ...	20.056	30.041	30.043	30.044	30.044	30.057	.058	.069	.079	.070	.050	30.010	29.970	29.943	29.930	29.927	29.938	29.954	29.969	29.984	29.997	.004	.000	29.990	30.009
" 6, ...	29.989	29.984	29.983	29.979	29.980	29.985	.001	.018	.040	.041	.030	29.999	29.957	29.933	29.920	29.921	29.946	29.965	30.001	30.023	30.034	.048	.064	30.064	29.996
" 7, ...	30.055	30.068	30.059	30.051	30.025	30.079	.119	.126	.151	.150	.125	30.088	30.045	30.033	30.024	30.027	30.042	30.076	.104	.122	.139	.156	.161	.166	30.092
" 8, ...	.169	.160	.158	.136	.144	.164	.191	.202	.214	.204	.191	.157	.123	.095	.085	.092	.106	.116	.131	.157	.164	.184	.187	.184	.155
" 9, ...	.186	.181	.174	.181	.193	.204	.217	.235	.244	.241	.230	.201	.170	.149	.136	.136	.148	.176	.197	.209	.217	.220	.216	.218	.195
" 10, ...	.218	.195	.186	.184	.187	.200	.213	.242	.260	.257	.260	.227	.191	.175	.173	.169	.181	.199	.212	.230	.241	.252	.256	.245	.215
" 11, ...	.234	.222	.205	.215	.204	.208	.213	.219	.232	.227	.216	.195	30.154	30.128	30.103	30.096	30.099	30.103	30.113	30.116	30.121	30.122	30.122	30.109	30.166
" 12, ...	30.095	30.072	30.078	30.054	30.054	30.062	30.082	30.052	30.095	30.080	30.064	30.027	29.973	29.952	29.921	29.912	29.903	29.906	29.924	29.917	29.922	29.908	29.901	29.995	
" 13, ...	29.907	29.903	29.892	29.890	29.896	29.915	29.924	29.944	29.962	29.971	29.958	29.952	29.931	29.923	29.924	29.931	29.939	29.943	29.951	29.974	29.990	30.007	30.014	29.994	
" 14, ...	29.988	29.98	29.972	29.991	30.006	30.014	30.039	30.065	30.083	30.094	30.097	30.067	30.037	30.020	30.019	30.032	30.043	30.055	30.078	30.098	30.109	.107	.123	30.133	30.052
" 15, ...	30.149	30.132	30.112	30.090	.103	.100	.137	.154	.160	.158	.142	.107	.069	.044	.034	.036	.046	.063	.082	.102	.118	.133	.135	.129	.106
" 16, ...	.119	.109	.107	.107	.108	.116	.135	.152	.163	.159	.149	.118	.083	.063	.056	.067	.076	.088	.105	.125	.143	.158	.157	.151	.117
" 17, ...	.147	.137	.124	.120	.121	.127	.134	.153	.161	.156	.146	.124	.086	.064	.051	.059	.070	.083	.115	.119	.134	.154	.157	.147	.120
" 18, ...	.134	.118	.109	.102	.105	.118	.134	.153	.157	.156	.140	.106	.068	.044	.026	.031	.051	.070	.092	.109	.114	.115	.112	.113	.103
" 19, ...	.110	.102	.097	.095	.103	.115	.140	.153	.162	.150	.123	.089	30.045	30.023	30.009	30.016	30.025	30.047	.065	.082	.093	.098	.094	.083	.089
" 20, ...	30.074	30.064	30.056	30.045	30.041	30.048	30.062	30.077	.084	.075	.060	30.027	29.983	29.952	29.946	29.952	29.955	29.985	30.002	30.020	.028	.024	30.015	30.004	30.024
" 21, ...	29.990	29.980	29.968	29.957	29.960	29.960	29.976	29.992	30.007	.011	.008	29.985	.953	.939	.939	.947	.956	.960	29.977	29.998	.000	.002	29.991	29.981	29.977
" 22, ...	.968	.952	29.937	29.935	29.934	29.942	29.961	29.974	29.993	.001	.024	29.991	29.963	29.946	29.945	29.945	29.946	29.967	29.979	29.997	.011	.011	30.011	30.018	29.973
" 23, ...	29.998	29.996	30.011	30.009	30.021	30.036	30.040	30.077	30.086	.090	.081	30.058	30.023	30.000	30.001	30.002	30.019	30.039	30.057	30.072	.083	.099	.100	.098	30.046
" 24, ...	30.094	30.092	.083	.087	.085	.092	.102	.115	.125	.123	.109	.094	.050	.024	.022	.030	.045	.065	.084	.104	.127	.134	.136	.133	.090
" 25, ...	.130	.121	.110	.109	.107	.115	.135	.147	.159	.175	.162	.135	.103	.086	.066	.069	.078	.092	.108	.131	.143	.156	.162	.162	.123
" 26, ...	.161	.153	.147	.136	.141	.156	.172	.186	.199	.203	.188	.162	.122	.097	.093	.095	.104	.123	.139	.159	.171	.176	.174	.171	.151
" 27, ...	.175	.169	.165	.169	.165	.173	.197	.209	.220	.213	.198	.167	.129	.103	.090	.084	.096	.110	.120	.145	.157	.173	.173	.171	.157
" 28, ...	.160	.150	.132	.129	.127	.132	.140	.152	.157	.163	.148	.124	.088	.067	.053	.051	.056	.069	.079	.085	.099	.103	.105	.106	.111
" 29, ...	.102	.087	.085	.079	.075	.083	.103	.122	.133	.134	.121	.093	.052	.032	.026	.023	.031	.043	.051	.076	.078	.077	.075	.077	
" 30, ...	.073	.069	.052	.047	.043	.048	.058	.089	.106	.106	.093	.073	.044	30.025	30.012	30.010	30.016	30.038	30.053	30.061	.071	.072	.073	30.062	.058
" 31, ...	.055	.044	.037	.028	.031	.047	.059	.065	.082	.089	.078	.051	.015	29.985	29.965	29.957	29.962	29.967	29.987	29.998	.004	.008	.007	29.993	.021
Hourly } Means,	30.100	30.090	30.083	30.080	30.081	30.093	30.109	30.125	30.137	30.136	30.124	30.096	30.060	30.038	30.027	30.028	30.039	30.054	30.071	30.087	30.097	30.105	30.105	30.100	30.086

TABLE II.
TEMPERATURE FOR THE MONTH OF DECEMBER, 1886. .

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means	Max.	Min.
Dec. 1.....	57.6	56.9	57.2	56.8	56.8	57.0	57.7	58.7	60.0	61.7	62.7	62.2	62.7	63.6	63.3	62.2	61.0	60.9	61.3	62.0	62.7	63.0	62.5	61.5	60.5	63.7	56.3
" 2.....	61.0	60.7	60.3	59.7	59.2	57.3	57.2	59.0	61.5	62.6	63.2	63.6	63.0	63.9	64.2	63.9	62.3	62.0	62.2	62.8	62.6	62.5	62.5	62.2	61.6	64.2	57.2
" 3.....	61.9	61.4	61.4	61.4	60.8	61.0	61.1	61.7	61.8	63.0	63.2	63.5	62.9	63.9	63.8	63.8	62.9	63.0	63.7	63.7	63.9	63.5	63.5	63.4	62.7	63.9	60.6
" 4.....	63.0	62.3	61.8	61.3	61.2	60.2	59.9	62.3	63.6	65.0	65.4	65.7	65.9	66.1	65.8	65.1	64.4	63.6	63.8	63.7	63.7	64.0	64.0	63.8	63.6	66.4	59.7
" 5.....	63.3	62.8	62.3	61.9	61.5	61.3	61.0	62.8	64.4	66.5	68.9	70.4	70.0	69.0	68.5	68.3	66.8	64.9	64.2	63.3	63.1	63.0	62.6	62.7	64.7	70.4	60.9
" 6.....	62.1	62.2	62.3	62.0	63.3	63.5	63.7	65.1	65.6	66.7	67.9	69.2	70.9	71.2	71.2	69.4	67.4	67.4	65.4	63.9	62.4	60.3	59.6	59.7	65.1	71.5	59.5
" 7.....	59.0	58.5	58.1	56.9	56.7	56.1	56.0	57.4	58.7	60.9	63.2	65.5	65.8	66.7	67.6	67.1	64.8	62.6	63.1	62.9	61.8	60.5	59.4	58.9	61.2	67.6	55.9
" 8.....	58.4	57.6	56.9	56.5	55.6	55.7	54.9	56.1	57.9	60.7	61.9	62.7	64.0	63.6	63.1	62.0	60.9	60.1	59.8	59.1	58.6	57.7	56.9	57.4	59.1	64.0	54.6
" 9.....	58.2	58.0	58.0	57.0	57.3	57.4	57.6	59.1	60.4	61.5	61.8	62.6	62.1	62.7	62.3	61.8	61.0	59.6	58.9	58.3	58.8	59.0	58.5	58.9	59.6	62.7	57.0
" 10.....	58.1	57.2	57.3	57.2	57.1	56.9	56.5	58.0	60.6	62.8	63.9	65.2	66.7	66.7	66.3	65.8	65.0	63.7	63.3	62.3	61.2	60.1	59.7	59.7	61.3	67.0	56.5
" 11.....	59.7	58.3	58.1	57.6	56.3	56.3	55.4	56.4	57.5	59.6	60.5	61.4	61.9	64.0	63.9	61.0	59.4	58.3	58.0	56.8	55.7	55.4	55.5	55.2	58.4	64.4	54.9
" 12.....	54.2	54.6	53.7	53.9	53.9	54.9	55.8	56.3	58.3	59.5	59.9	60.7	61.2	61.0	60.5	59.9	60.0	59.9	60.6	61.1	61.0	61.0	61.1	60.8	58.5	61.8	53.6
" 13.....	60.6	60.8	60.8	60.7	60.4	60.5	60.4	62.0	62.9	63.4	63.9	60.8	61.9	61.4	60.1	60.3	60.1	59.3	59.4	60.1	61.1	60.9	60.4	61.4	61.0	64.3	58.4
" 14.....	62.3	61.8	61.5	61.4	58.6	59.3	59.7	59.3	59.7	60.1	60.9	61.2	61.8	61.9	61.7	60.8	59.4	58.7	57.7	56.0	56.6	55.9	55.6	55.5	59.5	62.5	55.5
" 15.....	55.2	55.6	55.6	55.8	55.6	55.6	54.1	54.4	54.9	57.6	59.3	59.8	60.6	61.8	61.7	60.9	59.5	58.1	57.4	57.8	57.8	54.9	52.9	53.0	57.1	61.8	52.4
" 16.....	53.0	53.0	52.9	53.3	53.8	54.0	53.4	54.8	57.7	59.0	59.8	61.6	60.7	60.3	59.7	59.3	58.7	57.4	57.4	57.4	56.6	56.7	56.5	56.5	56.8	61.6	52.1
" 17.....	56.8	57.1	56.3	56.2	56.0	55.9	56.3	57.5	58.9	59.9	59.9	61.0	61.7	60.5	60.6	60.0	59.8	59.4	59.2	58.6	58.3	57.9	57.8	58.0	58.5	61.7	55.9
" 18.....	57.1	57.1	56.7	57.1	57.3	57.1	56.9	58.7	60.2	62.3	65.4	67.6	67.9	69.6	66.3	62.9	61.9	61.0	61.1	60.8	60.6	60.2	60.3	60.1	61.1	69.6	56.3
" 19.....	59.6	59.0	58.3	57.7	56.6	56.6	56.7	57.8	60.8	63.4	66.1	66.4	66.7	65.5	64.2	62.5	60.9	60.9	60.3	60.2	60.2	60.3	60.2	60.3	60.9	66.7	56.6
" 20.....	60.1	59.8	59.4	59.3	59.2	58.5	58.3	59.5	61.2	62.9	63.6	64.4	64.7	64.6	63.7	63.2	62.8	62.2	62.2	62.4	62.5	62.8	63.2	62.7	61.8	65.0	57.7
" 21.....	62.6	62.7	62.1	62.4	62.4	62.3	60.5	61.7	62.6	62.7	61.9	62.1	63.3	60.9	59.1	57.9	57.5	57.6	57.3	56.6	57.4	57.2	55.4	55.4	60.1	64.1	54.9
" 22.....	56.0	56.7	56.8	56.1	55.6	54.8	54.5	54.9	55.9	55.1	54.6	54.7	55.3	55.1	54.7	54.1	53.5	54.7	53.6	53.8	53.3	53.0	53.1	51.7	54.6	57.3	51.5
" 23.....	52.6	50.9	51.2	51.7	52.2	52.3	53.6	52.7	54.6	56.6	57.0	58.8	59.9	60.7	59.7	59.2	58.8	58.8	59.3	59.5	59.0	59.2	57.6	56.5	60.8	50.8	
" 24.....	56.7	55.4	54.4	54.7	53.7	54.0	52.8	55.2	57.7	60.6	61.8	62.4	63.0	62.7	60.9	60.1	60.0	58.6	58.7	59.1	59.3	59.1	58.8	58.6	58.3	63.2	51.8
" 25.....	58.3	58.0	58.1	57.9	56.9	56.5	56.7	57.8	59.4	60.9	61.4	62.8	64.0	64.0	63.9	62.7	61.7	59.7	58.0	57.9	57.7	57.8	57.2	57.1	59.4	64.5	56.5
" 26.....	56.7	56.2	55.4	55.2	55.7	56.0	55.6	57.4	59.3	60.1	62.0	62.5	63.2	63.3	63.2	61.8	61.0	59.4	58.2	57.8	57.4	58.2	57.9	57.9	58.8	63.6	54.7
" 27.....	57.4	57.1	55.8	55.6	56.1	55.9	53.9	55.6	57.5	59.7	60.1	60.9	60.7	63.5	62.8	61.9	59.8	59.3	57.8	57.4	57.1	56.2	55.9	55.7	58.1	63.5	53.7
" 28.....	55.2	54.2	54.7	54.5	54.1	53.7	53.8	54.0	55.3	56.7	58.6	59.9	60.9	60.7	61.4	60.8	59.6	57.5	55.0	54.1	53.6	56.1	54.4	52.8	56.3	61.5	52.8
" 29.....	52.9	53.0	52.9	51.4	51.2	52.4	52.2	54.9	56.2	58.1	59.3	58.8	59.5	59.1	57.8	57.7	57.5	56.2	55.8	56.3	56.9	57.5	58.7	59.5	56.1	59.5	50.8
" 30.....	59.0	58.8	59.8	59.9	59.9	59.6	59.7	60.3	60.2	60.7	60.6	61.1	61.5	61.7	61.2	61.3	60.9	60.7	60.5	60.4	60.1	60.2	60.3	60.4	60.4	62.0	58.7
" 31.....	60.7	61.5	61.7	62.3	62.5	62.6	62.8	64.8	65.6	66.6	68.3	66.5	66.7	67.2	65.9	64.6	63.2	62.7	62.1	61.9	61.3	60.7	60.8	63.5	68.6	60.4	
Hourly Means,	58.4	58.0	57.8	57.6	57.3	57.3	57.0	58.2	59.7	61.2	62.1	62.8	63.3	63.4	62.9	62.1	61.1	60.3	59.9	59.6	59.5	59.2	58.8	58.7	59.8	64.2	55.7

TABLE III.

TEMPERATURE OF EVAPORATION AND RADIATION, FOR THE MONTH OF DECEMBER, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.	Sun.	Rad.
Dec. 1.....	50.6	50.4	50.2	50.1	48.6	48.9	50.0	50.4	52.4	53.3	53.0	53.8	54.6	54.7	55.1	54.5	53.8	54.0	55.2	56.0	56.7	56.5	55.9	55.3	53.1	125.4	51.4
" 2.....	54.6	53.7	53.3	51.7	51.8	50.8	50.1	50.5	51.7	52.3	53.1	53.6	54.2	54.6	54.9	55.6	55.2	56.6	57.1	57.8	57.8	57.4	57.3	54.3	122.3	56.4	
" 3.....	56.8	56.2	56.2	55.6	55.4	54.9	53.9	54.2	54.7	55.6	55.8	56.3	56.5	56.6	56.9	58.1	57.7	57.8	58.7	59.0	58.9	58.6	58.4	58.4	56.7	124.1	57.3
" 4.....	58.0	57.7	57.4	56.9	56.3	56.1	55.6	56.1	56.4	57.1	56.8	56.6	57.4	57.5	57.9	58.4	59.0	58.9	59.5	60.0	60.2	60.2	59.5	57.9	125.6	52.6	
" 5.....	59.1	58.5	58.2	57.5	56.9	56.7	56.0	56.8	57.6	58.7	59.1	59.8	60.5	59.1	59.7	60.4	60.1	59.5	59.6	59.6	59.2	59.7	59.8	60.0	58.8	129.5	56.4
" 6.....	59.1	58.3	58.7	57.2	54.2	54.0	54.3	54.7	54.6	55.6	55.6	56.5	58.5	57.6	56.8	55.8	55.3	56.4	55.1	53.9	53.1	51.8	51.4	50.6	55.4	127.8	54.9
" 7.....	49.8	49.8	50.3	49.4	*48.2	*46.9	45.6	46.5	47.2	47.3	49.0	49.4	49.2	50.2	49.5	48.5	51.4	52.9	48.9	46.5	46.6	46.7	46.4	45.8	48.4	127.2	53.1
" 8.....	45.3	44.8	44.4	44.9	43.6	43.3	43.2	43.9	45.0	45.5	46.6	46.3	49.2	48.1	46.9	48.6	48.4	47.8	48.3	49.2	49.8	50.5	51.1	50.8	46.9	124.0	47.0
" 9.....	51.9	50.6	49.9	49.0	48.1	49.1	47.6	48.5	47.8	49.6	48.4	48.9	49.7	51.1	52.1	51.8	49.9	49.0	49.5	49.7	50.5	51.6	51.6	51.6	49.9	123.7	46.9
" 10.....	49.6	50.5	51.4	51.2	50.2	49.9	49.5	50.8	48.9	48.8	49.7	49.8	50.0	51.0	50.4	50.3	50.7	49.1	48.5	47.0	46.8	46.8	47.1	46.5	49.4	123.7	47.1
" 11.....	46.3	46.2	45.0	45.3	43.6	43.4	43.2	43.4	44.6	44.9	45.7	46.3	46.4	46.5	46.3	48.3	48.0	47.4	47.5	48.1	48.2	48.7	49.0	48.7	46.3	122.3	45.1
" 12.....	48.7	49.0	49.1	48.7	48.2	48.0	48.5	49.4	51.2	52.9	52.8	53.3	53.7	54.0	53.7	53.6	54.4	55.3	56.4	57.4	57.7	57.8	57.7	57.6	52.9	119.3	42.1
" 13.....	57.3	57.3	56.8	56.6	56.3	56.3	55.9	56.6	57.1	56.8	57.3	56.6	56.8	58.3	58.8	59.1	58.9	57.5	57.1	57.6	58.2	58.6	57.8	56.6	57.3	89.5	57.2
" 14.....	55.7	55.4	54.5	53.4	53.7	53.2	52.2	52.5	52.4	51.7	51.6	51.5	51.5	50.8	50.4	49.2	47.6	45.7	44.7	44.3	43.8	42.9	42.4	42.4	49.7	132.6	52.4.
" 15.....	42.1	41.4	40.8	40.6	40.0	40.9	39.9	40.0	40.6	42.0	43.4	43.4	44.0	44.5	44.4	44.5	43.3	42.8	43.7	42.7	42.0	42.2	45.1	44.1	42.4	122.1	44.4
" 16.....	45.4	44.9	45.5	43.1	41.4	41.2	42.2	44.6	45.6	47.3	47.6	49.4	50.6	50.5	50.5	49.7	49.2	48.6	48.3	48.6	48.7	49.2	49.5	49.7	47.1	119.5	42.4
" 17.....	49.2	49.2	50.2	50.3	49.7	49.9	49.7	49.6	49.9	50.6	51.3	51.3	51.3	51.9	52.1	52.9	52.6	52.4	53.2	53.5	53.7	53.7	53.9	53.8	51.5	118.5	51.3
" 18.....	53.9	51.2	54.0	52.9	53.2	52.7	52.5	52.4	53.6	53.9	54.6	53.3	53.2	52.4	54.1	56.0	55.3	55.1	56.4	57.4	57.4	57.2	57.5	56.8	54.6	124.2	46.6
" 19.....	56.0	55.5	55.1	54.3	53.5	53.6	52.0	51.4	52.6	53.7	53.6	54.0	53.8	54.5	53.8	54.3	54.8	55.5	55.9	56.3	56.4	56.7	54.3	123.2	49.1		
" 20.....	56.4	55.6	55.1	54.9	54.7	54.0	53.5	54.2	54.4	53.5	53.3	53.6	54.2	55.4	55.1	55.5	56.5	57.5	57.8	58.5	58.8	58.6	58.7	55.7	130.1	53.5	
" 21.....	58.8	58.6	58.3	57.4	54.1	54.0	54.0	54.6	54.5	56.5	55.8	55.7	55.8	56.2	54.9	54.7	54.5	54.5	54.2	54.4	54.7	54.5	54.4	54.4	55.5	80.5	54.9
" 22.....	54.0	53.9	53.9	53.7	54.0	53.6	52.5	52.6	52.8	52.3	52.2	52.4	53.6	53.4	53.0	51.7	51.5	51.8	51.5	51.8	51.8	51.2	50.7	50.5	52.5	67.1	51.2
" 23.....	50.2	50.0	50.1	49.8	49.3	49.0	48.4	48.5	49.6	50.3	50.6	52.1	52.3	53.1	52.6	52.0	51.7	51.6	51.7	51.0	50.8	51.2	50.6	49.9	50.7	104.0	49.2
" 24.....	47.5	46.4	46.1	46.5	46.9	47.1	45.4	46.3	48.2	50.7	51.7	52.3	52.5	52.5	53.4	54.3	54.3	54.1	54.1	54.3	54.5	54.5	53.6	50.9	126.4	48.9	
" 25.....	53.3	52.8	53.1	53.0	52.6	52.4	52.5	52.8	53.6	51.7	52.0	53.0	55.2	55.4	56.3	54.6	54.9	54.5	53.8	53.8	53.6	54.2	54.3	53.7	121.1	53.1	
" 26.....	54.2	54.1	53.4	53.6	48.6	46.6	45.4	45.4	46.1	48.7	49.7	51.3	52.1	53.3	54.4	52.5	53.0	54.5	53.7	53.3	53.5	53.7	54.0	54.2	51.6	119.7	46.0
" 27.....	53.5	52.7	52.0	49.5	48.5	45.1	44.6	44.7	45.8	47.1	47.9	48.4	48.0	51.7	51.5	50.6	52.0	47.6	46.1	45.6	44.8	44.3	43.4	47.9	118.5	49.2	
" 28.....	42.8	43.4	42.0	41.8	41.6	41.8	41.6	41.9	43.3	43.6	45.3	45.9	47.4	47.5	48.3	47.8	46.8	45.1	45.1	44.6	44.6	43.8	42.9	44.9	44.3	120.7	44.4
" 29.....	45.9	45.8	43.0	44.5	43.2	43.7	44.6	45.8	46.4	47.5	47.3	47.3	48.4	46.8	47.5	48.2	48.3	47.5	47.7	48.7	49.7	51.3	52.9	52.5	47.3	118.4	40.5
" 30.....	51.0	51.5	51.7	50.6	49.9	50.3	50.3	49.5	50.4	52.0	51.8	52.4	53.4	54.4	54.2	54.6	54.7	55.5	55.3	54.2	54.5	55.0	55.3	56.5	52.9	82.8	54.8
" 31.....	56.3	55.7	55.9	55.4	55.0	54.9	55.4	56.1	56.2	57.3	57.6	58.2	59.4	59.9	60.4	60.2	59.8	59.5	60.0	59.0	59.1	58.7	58.6	58.6	57.8	116.4	56.6
Hourly Means,	52.0	51.7	51.5	50.9	50.1	49.7	49.4	49.8	50.5	51.2	51.6	52.0	52.7	53.0	53.1	53.1	53.0	52.7	52.7	52.7	52.7	52.7	52.7	52.7	51.9	117.1	50.2

* Interpolated.

TABLE IV.

MEAN HOURLY AND DAILY RELATIVE HUMIDITY AND TENSION OF AQUEOUS VAPOUR
FOR THE MONTH OF DECEMBER, 1886.

Hour.	Hourly Mean.		Date.	Daily Mean.	
	Humidity.	Tension.		Humidity.	Tension.
			1886.		
1 a	61	0.308	Dec. 1,.....	57	0.307
2 "	62	.306	" 2,.....	59	.326
3 "	62	.303	" 3,.....	67	.382
4 "	60	.289	" 4,.....	69	.407
5 "	57	.272	" 5,.....	68	.419
6 "	55	.262	" 6,.....	50	.312
7 "	54	.258	" 7,.....	31	.173
8 "	50	.253	" 8,.....	32	.162
9 "	47	.251	" 9,.....	45	.232
10 "	45	.250	" 10,.....	35	.197
11 "	44	.249	" 11,.....	32	.156
Noon.	43	.250	" 12,.....	67	.328
1 p	45	.263	" 13,.....	78	.423
2 "	45	.269	" 14,.....	45	.229
3 "	48	.279	" 15,.....	16	.080
4 "	51	.290	" 16,.....	42	.197
5 "	55	.301	" 17,.....	58	.290
6 "	57	.303	" 18,.....	63	.342
7 "	59	.308	" 19,.....	63	.336
8 "	60	.313	" 20,.....	67	.365
9 "	61	.314	" 21,.....	73	.381
10 "	62	.320	" 22,.....	87	.369
11 "	65	.325	" 23,.....	64	.295
Midt.	65	.324	" 24,.....	56	.277
			" 25,.....	67	.339
			" 26,.....	58	.289
			" 27,.....	41	.200
			" 28,.....	30	.135
			" 29,.....	46	.211
			" 30,.....	57	.303
			" 31,.....	69	.405
Mean,	55	0.286	Mean,	55	0.286

TABLE V.
DURATION OF SUNSHINE.

TABLE VI.

RAINFALL FOR THE MONTH OF DECEMBER, 1886.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Sums.	
Dec. 1,	
" 2,	
" 3,	
" 4,	
" 5,	
" 6,	
" 7,	
" 8,	
" 9,	
" 10,	
" 11,	
" 12,	
" 13,	0.005	...	0.015	0.030	...	0.070	...	...	...	...	...	...	...	0.120	
" 14,	0.005	0.035	...	...	...	...	...	...	...	...	...	...	...	0.040	
" 15,	
" 16,	
" 17,	
" 18,	
" 19,	
" 20,	0.035	...	...	...	...	...	...	...	...	...	...	...	...	...
" 21,	0.035	...	...	...	...	...	...	...	...	...	...	...	...	0.300	
" 22,	0.005	...	0.005	...	0.005	...	0.120	0.065	0.005	...	0.005	...	0.030	0.055	0.125	0.050	0.010	0.105	0.035	0.140	0.105	0.095	0.045	0.045	0.070	1.115
" 23,	0.040	0.070	0.005	0.005	0.025	0.010	0.010	0.035	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.200
" 24,	
" 25,	
" 26,	
" 27,	
" 28,	
" 29,	
" 30,	
" 31,	
Sums,.....	0.045	0.070	0.005	0.015	0.060	0.130	0.075	0.040	0.035	0.005	...	0.035	0.055	0.140	0.125	0.015	0.175	0.035	0.145	0.105	0.095	0.090	0.210	0.070	1.775	

TABLE VII.

DIRECTION AND VELOCITY OF THE WIND FOR THE MONTH OF DECEMBER, 1886.

DATE.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Sums.	Means.																									
	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.																															
Dec.	3	11	2	12	31	7	31	8	2	19	1	19	2	13	3	14	6	15	5	16	7	14	9	18	10	17	10	19	8	16	7	14	7	18	7	23	7	25	6	28	6	24	466	16.9							
"	2	5	26	6	29	6	24	5	19	4	14	2	9	1	9	5	17	5	19	6	20	8	21	8	17	10	19	7	18	7	23	7	27	7	29	7	30	6	29	488	20.3										
"	3	6	27	6	26	5	25	5	24	6	22	6	23	4	21	6	24	7	27	7	28	7	27	9	22	8	18	8	21	8	19	7	18	7	22	7	25	7	28	7	31	7	33	582	24.2						
"	4	6	24	6	24	7	23	6	21	6	16	5	9	3	5	5	10	7	14	7	21	8	20	10	22	10	20	11	17	10	21	9	21	8	16	8	15	7	15	7	19	7	18	7	20	7	24	443	18.5		
"	5	7	25	7	24	7	20	4	11	5	11	6	12	5	11	7	11	8	10	9	14	10	11	10	9	9	6	26	9	24	9	24	6	24	4	...	1	...	1	24	2	7	11	8	13	8	10	9	8	249	10.4
"	6	8	6	8	9	6	5	2	8	2	16	1	18	1	20	1	9	2	11	1	13	32	9	2	5	19	5	32	4	31	11	32	11	32	7	1	4	1	2	1	6	3	9	2	7	1	7	1	9	211	8.8
"	7	2	15	1	16	2	18	1	30	32	54	6	30	32	26	32	28	32	23	1	20	1	15	1	19	32	22	32	23	1	23	1	18	4	14	7	11	4	11	2	20	2	22	1	19	1	13	32	19	509	21.2
"	8	1	18	32	17	1	15	2	13	1	18	1	22	1	21	1	22	1	13	4	16	6	19	4	15	4	14	8	16	8	19	9	15	8	14	6	12	6	11	6	8	5	6	5	3	7	8	8	338	14.1	
"	9	6	11	5	10	3	9	32	11	1	11	3	11	5	10	6	11	7	13	9	19	10	20	9	18	10	19	10	14	6	10	6	6	9	7	8	10	8	7	7	8	5	6	300	12.5						
"	10	2	6	1	3	5	7	5	6	5	6	5	7	3	8	1	5	1	20	1	28	1	23	1	17	32	14	32	16	1	17	1	13	1	11	1	8	2	9	2	15	2	11	1	10	1	13	1	15	288	12.0
"	11	1	14	31	8	31	15	32	11	32	15	32	18	32	17	1	21	1	12	6	15	7	11	10	12	8	9	2	12	8	16	7	13	6	11	8	4	4	9	2	9	2	...	1	...	1	261	10.9			
"	12	13	2	...	1	...	1	...	1	5	8	5	11	5	13	6	12	7	20	7	24	7	25	7	25	7	26	7	29	6	25	7	23	8	26	8	25	7	26	7	23	7	33	460	19.2						
"	13	7	31	7	29	7	32	7	30	7	31	6	25	7	27	7	27	7	24	7	21	5	16	6	12	30	5	28	5	26	3	1	4	2	10	1	12	2	13	2	14	2	19	4	17	2	23	455	19.0		
"	14	3	20	2	17	1	17	1	16	4	15	3	10	1	19	1	21	1	24	1	26	1	25	1	28	1	23	1	20	3	17	1	13	2	12	1	10	1	9	3	10	3	9	2	...	1	512	21.3			
"	15	2	23	2	23	1	29	2	33	3	24	3	31	6	17	1	20	1	25	1	15	1	11	32	14	32	15	1	13	2	12	1	12	1	10	1	9	3	10	3	9	2	...	1	368	15.3					
"	16	9	2	12	3	12	2	7	2	6	4	5	2	8	3	9	5	9	10	8	14	10	15	11	14	10	14	9	15	8	16	9	15	9	14	9	12	8	10	7	9	7	11	6	12	220	9.2				
"	17	6	13	4	15	5	16	4	17	5	16	4	15	5	15	4	16	7	20	8	22	8	22	9	22	8	22	8	21	8	18	8	18	8	15	8	15	7	7	7	7	2	...	1	344	14.3					
"	18	1	7	2	...	1	6	6	6	8	5	5	5	4	7	4	7	4	9	12	9	8	18	5	17	7	11	5	13	6	9	14	8	22	8	19	8	19	7	13	6	12	6	14	5	10	228	9.5			
"	19	4	5	4	8	4	6	4	6	32	5	32	4	1	5	1	4	5	6	7	6	6	11	10	12	11	15	9	21	9	23	8	28	7	21	7	16	7	14	6	12	6	13	6	13	280	11.7				
"	20	6	14	6	15	6	13	6	10	6	9	6	7	6	7	6	7	7	12	8	17	9	22	9	21	10	17	9	19	8	17	8	18	8	19	8	16	7	17	7	19	7	16	7	14	6	11	7	10	347	14.5
"	21	7	5	8	5	8	13	6	7	11	1	14	2	9	4	9	1	16	2	10	1	12	2	17	2	14	1	11	32	13	2	18	2	18	2	19	2	18	2	17	3	22	2	20	2	16	32	8	322	13.4	
"	22	2	9	2	17	3	17	3	13	7	9	31	7	1	20	32	32	17	1	19	1	26	32	22	32	22	32	19	32	32	24	1	25	1	23	1	19	1	25	1	23	1	23	459	19.1						
"	23	1	23	31	16	32	14	32	18	32	17	32	19	2	20	1	20	2	20	1	21	1	18	1	19	1	14	1	11	1	14	1	14	1	1	9	1	11	368	15.3											
"	24	32	18	32	22	32	21	32	17	32	11	1	10	32	18	32	21	32	11	6	10	5	10	6	12	7	16	8	21	7	16	7	14	7	13	7	18	7	17	383	16.0										
"	25	7	19	7	17	7	15	6	16	6	13	7	14	5	11	6	14	7	15	8	15	10	16	11	10	10	6	21	4	25	5	25	6	25	4	30	3	8	7	9	11	9	8	9	8	8	6	252	10.5		
"	26	8	6	8	6	...	1	8	2	32	4	1	7	1	18	1	18	4	4	12	3	19	6	23	7	24	12	24	11	23	7	23	3	29	3	...	0	11	6	10	8	10	7	9	7	9	172	7.2			
"	27	6	5	5	6	2	9	2	9	1	10	1	7	4	5	1	14	32	14	1	15	12	7	10	5	22	9	19	4	20	5	22	4	13	3	1	10	32	20	31	16	32	14	32	9	32	17	32	15	232	9.7
"	28	31	18	31	13	32	21	32	27	1	28	1	28	1	28	1	32	1	33	1	33	32	24	32	16	3	9	9	6	8	9	9	5	5	5	3	9	3	7	2	3	8	13	7	6	3	363	15.1			
"	29	...	1	32	7	32	7	6	2	6	4	6	7	7	6	5	9	5	12	8	13	8	18	7	17	9	16	9	17	10	19	10	20	10	13	11	10	5	8	6	8	6	8	7	12	6	17	7	25	276	11.5
"	30	7	26	7	19	6	15	6	15	6	13	7	13	7	12	7	15	8	18	8	18	8	15	10	8	1	3	11	3	11	3	...	1	2	3	...	0	8	8	7	13	8	12	6	9	7	13	7	15	270	11.3
"	31	7	20	7	14	7	17	7	15	7	14	8	11	7	10	7	9	7	9	7	9	30	5	24	8	23	6	25	6	25	6	23	5	...	1	...	1	22	6	11	4	11	3	...	0	204	8.5				
Sums.	...	444	439	432	422	456	428	429	459	508	539	499	480	438	431	463	454	409	369	371	389	421	425	444	441	10590	441.4																								
Hourly Means,...	...	14.3	14.2	13.9	13.8	13.6	14.7	13.8	13.8	14.8	14.8	16.4	17.4	16.1	15.5	14.1	14.1	13.9	14.9	14.9	14.6	14.6	13.2	11.9	12.0	12.5	13.6	13.7	14.3	14.2	341.6	14.2																			

TABLE VIII.

MEAN HOURLY COMPONENTS AND MEAN DIRECTION OF THE WIND, FOR DECEMBER, 1886.

Hour.	Components (miles per hour).						Direction.
	N	E	S	W	+ N-S	+ E-W	
1 a.	6.8	9.1	0.0	0.0	+6.8	+9.1	E 37° N
2 "	7.1	8.5	0.1	0.0	7.1	8.5	E 40° N
3 "	7.9	7.5	0.0	0.0	7.9	7.5	E 46° N
4 "	9.1	6.6	0.0	0.0	9.1	6.6	E 54° N
5 "	10.0	6.7	0.0	0.0	10.0	6.7	E 56° N
6 "	9.9	5.7	0.0	0.0	9.9	5.7	E 60° N
7 "	10.2	5.5	0.0	0.0	10.2	5.5	E 62° N
8 "	10.5	5.5	0.0	0.0	10.5	5.5	E 62° N
9 "	9.0	8.2	0.0	0.0	9.0	8.2	E 48° N
10 "	8.2	10.2	0.0	0.0	5.1	10.1	E 27° N
11 "	5.9	10.2	0.8	0.1	4.0	9.1	E 24° N
Noon.	5.8	9.3	1.8	0.2	2.8	7.6	E 20° N
1 p.	4.5	8.5	1.7	0.8	3.3	7.2	E 25° N
2 "	4.3	8.3	1.0	1.1	3.1	7.6	E 22° N
3 "	4.5	8.8	1.5	1.2	2.9	8.5	E 19° N
4 "	4.0	9.4	1.1	1.0	3.3	8.7	E 21° N
5 "	3.7	9.3	0.4	0.5	3.6	7.9	E 25° N
6 "	3.9	8.1	0.3	0.3	4.6	8.1	E 30° N
7 "	4.6	8.1	0.0	0.0	4.6	8.2	E 29° N
8 "	4.7	8.3	0.1	0.1	4.9	9.2	E 28° N
9 "	5.1	9.4	0.2	0.2	5.3	9.0	E 30° N
10 "	5.4	9.0	0.1	0.0	5.2	9.6	E 28° N
11 "	5.5	9.6	0.3	0.0	+6.0	+9.0	E 34° N
Midt.	6.0	9.0	0.0	0.0			
Mean,.....	6.5	8.3	0.4	0.2	+6.1	+8.1	E 36° N

TABLE IX.

DIRECTION AND FORCE OF THE WIND AT VICTORIA PEAK, AND SEA DISTURBANCE.

DATE.	4 a.			10 a.			4 p.			10 p.		
	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.	Sea.
1886.												
Dec. 1,.....	1	E	5	2	E	4	2	E	5	3
" 2,.....	4	E	6	4	E	5	3	E	6	4
" 3,.....	3	E	6	4	ENE	3	3	NE	5	3
" 4,.....	4	E	5	2	E	2	2	E	3	2
" 5,.....	3	E	4	2	N	3	1	N	4	2
" 6,.....	1	N	3	2	NE	5	1	NE	5	2
" 7,.....	3	NNE	6	3	NE	3	3	E	4	3
" 8,.....	2	ENE	6	2	ENE	3	3	E	4	2
" 9,.....	3	E	5	2	E	4	3	E	5	2
" 10,.....	2	NE	4	2	NE	5	2	ENE	4	2
" 11,.....	2	NE	5	2	NE	3	1	ENE	7	3
" 12,.....	2	E	4	2	E	6	3	NE	5	1
" 13,.....	4	E	6	4	N	5	2	N	5	2
" 14,.....	2	N	6	2	NE	4	1	NE	4	1
" 15,.....	2	NE	5	2	E	3	1	ENE	5	1
" 16,.....	1	E	4	1	E	5	2	E	4	1
" 17,.....	2	E	6	3	N	3	2	E	4	3
" 18,.....	2	E	3	2	E	4	2	E	4	3
" 19,.....	3	E	5	3	E	4	3	E	6	3
" 20,.....	3	E	4	4	E	5	3	NE	7	3
" 21,.....	1	NE	6	1	NE	5	2	NE	5	2
" 22,.....	2	NE	6	2	NE	7	3	NE	5	3
" 23,.....	2	NE	4	2	ENE	4	2	E	4	1
" 24,.....	2	NE	4	2	N	4	1	NE	4	1
" 25,.....	3	E	5	4	ENE	3	1	NE	3	1
" 26,.....	1	E	4	1	E	3	1	E	5	1
" 27,.....	1	NE	4	1	E	5	1	E	5	1
" 28,.....	2	NE	6	3	E	4	2	E	5	2
" 29,.....	1	E	5	2	E	5	1	E	5	2
" 30,.....	2	E	5	1	NE	3	1	NE	4	1
" 31,.....	1	E	5	1						
Mean,.....	2.2	E 21° N	4.9	2.4	E 26° N	4.2	1.9	E 22° N	4.6	2.2

TABLE X.
VICTORIA PEAK.

DATE.	BAROMETER.			TEMPERATURE.							
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	Sun.	Max.	Min.	Rad.	
1886.	ins.	ins.	ins.	°	°	°	°	°	°	°	°
Dec. 1,.....	28.378	28.302	28.363	54.6	56.7	51.0	118.7	58.1	45.1	46.3	
2,.....	.377	.318	.374	55.6	57.0	52.6	114.9	58.9	45.3	46.6	
3,.....	.385	.311	.307	56.0	58.6	55.2	112.1	59.9	50.1	50.2	
4,.....	.372	.265	.251	57.6	61.8	57.8	119.8	62.1	50.1	52.2	
5,.....	.291	.198	.234	60.4	62.8	61.0	121.2	65.3	51.1	51.6	
6,.....	.260	.183	.274	59.6	63.8	56.0	118.7	64.9	51.1	46.2	
7,.....	.327	.257	.378	54.5	59.6	52.8	114.3	59.9	45.2	44.2	
8,.....	.387	.310	.356	52.8	55.0	52.6	115.4	57.6	46.1	44.2	
9,.....	.426	.353	.365	53.0	55.6	52.0	118.7	56.4	43.1	45.2	
10,.....	.410	.392	.397	53.8	57.6	51.6	113.2	58.1	47.1	45.2	
11,.....	.407	.330	.393	52.2	56.6	51.6	115.4	56.9	43.1	42.2	
12,.....	.284	.146	.131	53.0	52.6	53.6	113.2	55.9	46.1	48.2	
13,.....	.180	.154	.192	53.8	54.6	52.6	89.9	55.5	52.6	47.2	
14,.....	.273	.232	.219	52.6	53.8	50.6	116.5	56.9	45.3	45.2	
15,.....	.313	.259	.260	50.0	54.6	50.6	123.1	56.1	40.1	42.2	
16,.....	.331	.281	.324	54.0	54.8	48.6	113.2	54.9	44.1	41.2	
17,.....	.358	.279	.337	52.4	52.7	50.0	112.1	54.6	44.1	45.2	
18,.....	.360	.273	.318	52.7	56.6	53.6	118.7	58.1	45.1	44.2	
19,.....	.357	.266	.293	54.6	56.6	52.6	120.9	57.8	46.1	46.2	
20,.....	.277	.197	.245	55.2	56.0	53.8	112.1	57.9	50.1	45.2	
21,.....	.216	.168	.157	54.6	53.6	50.6	120.9	56.1	46.1	43.2	
22,.....	.186	.119	.189	50.6	50.6	48.8	101.1	52.0	43.1	41.2	
23,.....	.273	.209	.250	48.8	51.2	50.2	114.3	53.9	41.5	43.2	
24,.....	.311	.255	.248	50.6	51.0	50.6	118.7	55.5	42.1	42.6	
25,.....	.346	.302	.294	53.2	56.4	52.8	115.4	57.9	45.1	45.2	
26,.....	.383	.318	.325	52.8	57.6	52.6	113.2	57.9	41.7	43.2	
27,.....	.388	.317	.310	51.2	55.6	52.6	116.5	56.5	41.1	41.2	
28,.....	.345	.279	.297	48.6	52.6	49.2	111.0	56.5	40.1	41.2	
29,.....	.312	.266	.286	50.8	56.0	46.8	113.2	53.5	40.1	42.2	
30,.....	.313	.231	.281	51.4	52.6	51.8	94.3	53.5	43.1	45.2	
31,.....	.301	.212	.208	55.8	59.6	54.8	112.1	59.7	47.1	50.2	
Mean,.....	28.328	28.257	28.276	53.4	56.0	52.3	114.1	57.1	45.3	45.1	

TABLE XI.
HUMIDITY AT THE OBSERVATORY AND AT VICTORIA PEAK.

DATE.	RELATIVE HUMIDITY.						TENSION OF AQUEOUS VAPOUR.					
	OBSERVATORY.			VICTORIA PEAK.			OBSERVATORY.			VICTORIA PEAK.		
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.
1886.	53	57	64	74	70	77	0.297	0.325	0.372	0.315	0.321	0.289
Dec. 1,.....	45	56	72	62	70	86	.257	.333	.406	.277	.328	.340
2,.....	60	69	73	78	77	88	.346	.410	.429	.351	.379	.387
3,.....	58	64	79	82	70	79	.363	.402	.472	.391	.390	.382
4,.....	61	60	81	76	75	75	.392	.422	.470	.401	.406	.400
5,.....	46	38	52	65	56	61	.296	.266	.274	.333	.337	.272
6,.....	28	14	27	50	32	24	.148	.097	.139	.212	.163	.100
7,.....	19	30	57	35	38	58	.106	.167	.274	.140	.163	.230
8,.....	36	46	57	50	48	52	.199	.254	.286	.202	.212	.204
9,.....	28	25	28	53	47	41	.161	.161	.146	.225	.227	.159
10,.....	21	32	58	43	41	47	.106	.172	.257	.169	.190	.182
11,.....	62	64	81	75	80	97	.315	.329	.438	.304	.317	.397
12,.....	65	93	86	90	92	86	.375	.487	.461	.378	.395	.340
13,.....	52	37	24	79	67	59	.274	.198	.107	.314	.279	.217
14,.....	14	14	24	37	39	34	.064	.079	.104	.134	.168	.127
15,.....	35	46	51	45	60	70	.178	.231	.253	.189	.261	.242
16,.....	48	60	75	67	78	62	.217	.308	.359	.267	.313	.225
17,.....	54	62	82	78	69	86	.306	.358	.430	.313	.317	.354
18,.....	38	56	76	66	63	79	.223	.320	.402	.284	.291	.314
19,.....	49	58	77	78	78	77	.287	.341	.438	.339	.351	.325
20,.....	66	81	83	84	92	92	.377	.392	.391	.362	.380	.339
21,.....	81	84	87	94	92	75	.357	.353	.355	.350	.339	.263
22,.....	61	58	55	83	90	83	.283	.291	.275	.289	.342	.299
23,.....	45	66	73	78	75	87	.241	.316	.365	.289	.312	.324
24,.....	49	57	78	81	81	77	.263	.321	.374	.333	.373	.312
25,.....	37	49	73	71	60	79	.195	.271	.354	.286	.284	.314
26,.....	31	40	30	55	57	54	.159	.221	.137	.210	.252	.216
27,.....	26	31	29	50	48	41	.113	.162	.126	.171	.192	.144
28,.....	39	44	62	32	55	81	.190	.213	.297	.115	.247	.261
29,.....	51	62	70	70	88	58	.274	.339	.365	.269	.351	.326
30,.....	57	70	85	78	76	90	.362	.447	.461	.353	.389	.392
Mean,.....	46	52	63	66	66	70	0.250	0.291	0.323	0.276	0.299	0.277

TABLE XII.

AMOUNT AND CLASSIFICATION OF CLOUDS AND DIRECTION WHENCE COMING.

DATE.	1 a.			4 a.			7 a.			10 a.		
	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction
1886.												
Dec. 1,	1	cum.	N	10	cum.	NE	4	e-str.	W	4	e-str.	W
" 2,	1	cum.	ENE	0	...	...	2	e-str.	W	1	e-cum.	...
" 3,	1	cum.	E	0	...	...	0	...	...	1	cum.	ENE
" 4,	7	cum.	ENE	4	cum.	NE	0	...	...	0	...	...
" 5,	8	cum.	ENE	6	cum.	...	1	e-str.	...	0	...	...
" 6,	5	e-str.	...	4	e-str.	...	4	e-str.	SW	3	e-str.	WSW
" 7,	2	cum.	N	0	...	...	0	...	...	0	...	...
" 8,	0	...	...	0	...	...	0	...	...	0	...	...
" 9,	0	...	...	0	...	...	0	...	...	0	...	...
" 10,	0	...	...	0	...	...	0	...	...	0	...	...
" 11,	0	...	...	0	...	...	0	...	...	0	...	...
" 12,	0	...	...	0	...	...	3	cum.	ESE	0	...	...
" 13,	10	cum-nim.	E	10	cum-nim.	E	10	cum.	S	10	cum.	ESE
" 14,	10	cum-nim.	NE	10	nim.	NE	10	cum-nim.	NNE	10	str.	WSW
" 15,	3	cum.	...	2	cum.	...	0	...	...	0	...	...
" 16,	0	...	...	0	...	...	1	e.	...	0	...	...
" 17,	0	...	...	1	cum.	E	0	...	...	0	...	...
" 18,	0	...	...	0	...	...	0	...	...	0	...	...
" 19,	0	...	...	1	cum.	...	0	...	...	1	e-str.	...
" 20,	0	...	...	7	e-str. cum.	SW	2	e-str.	WSW	1	e-str.	W
" 21,	10	cum-nim.	ENE	10	cum-nim.	ENE	10	nim.	NE	10	nim.	NNE
" 22,	10	nim.	N	10	nim.	N	10	nim.	NNE	10	nim.	NE
" 23,	10	nim.	NE	10	nim.	NE	10	nim.	ENE	10	str. cum-nim.	NE
" 24,	10	nim.	NE	7	cum.	ENE	2	e-cum.	E	0	...	...
" 25,	10	cum-nim.	NNE	7	cum. R-cum.	E	0	...	...	0	...	...
" 26,	0	...	...	0	...	...	0	...	...	0	...	...
" 27,	0	...	...	0	...	...	0	...	...	0	...	...
" 28,	0	...	...	0	...	...	0	...	...	0	...	...
" 29,	0	...	...	0	...	...	0	...	...	0	...	...
" 30,	0	...	...	10	cum-nim.	E	10	R-cum.	ESE	10	cum-nim.	E
" 31,	10	str.	...	10	cum.	W	10	cum.	WSW	10	cum.	WSW
Mean,.....	3.5	...	...	3.8	...	...	2.9	...	...	2.6	...	...

TABLE XII.—Continued.

AMOUNT AND CLASSIFICATION OF CLOUDS AND DIRECTION WHENCE COMING.

DATE.	1 p.			4 p.			7 p.			10 p.			Daily and Monthly Means.
	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	
1886.													
Dec. 1,.....	4	e-str.	W	1	e-cum.	...	4	eum.	...	4	eum.	NE	4.0
" 2,.....	0	...	...	0	...	...	4	eum.	ENE	2	eum.	ENE	1.3
" 3,.....	1	cum.	E	1	cum.	E	2	cum.	E	6	cum.	E	1.5
" 4,.....	0	...	...	0	...	...	0	...	...	8	cum.	E	2.4
" 5,.....	0	...	...	1	e-str.	...	1	e-str.	...	2	e-str.	...	2.4
" 6,.....	1	e-str.	...	1	e-str.	W	0	...	...	0	...	...	2.2
" 7,.....	1	e-str.	W	0	...	...	0	...	...	0	...	...	0.4
" 8,.....	0	...	...	0	...	...	1	e-cum.	W	0	...	...	0.0
" 9,.....	0	...	...	0	...	...	0	...	...	0	...	...	0.0
" 10,.....	0	...	...	0	...	...	0	...	...	0	...	...	0.0
" 11,.....	0	...	...	0	...	...	0	...	...	0	...	...	0.0
" 12,.....	0	...	...	5	e-str. cum.	SSE	6	sm-cum. cum.	SSE E	9	sun-cum. cum.	S E	2.9
" 13,.....	10	str. nim.	E	10	nim.	E	9	cum-nim.	E	10	nim.	NE	9.9
" 14,.....	10	str-cum.	WNW	9	sm-cum.	W	2	sm-cum.	W	2	sm-cum.	W	7.9
" 15,.....	0	...	...	0	...	...	0	...	...	0	...	...	0.6
" 16,.....	0	...	...	0	...	...	0	...	...	0	...	...	0.1
" 17,.....	0	...	...	0	...	...	0	...	...	0	...	...	0.1
" 18,.....	1	cum.	...	0	...	...	0	...	...	0	...	...	0.1
" 19,.....	0	...	...	0	...	...	0	...	...	0	...	...	0.2
" 20,.....	9	sm-cum.	WSW	10	str-cum.	...	10	str.	...	10	str.	...	6.1
" 21,.....	10	str. cum-nim.	NNE	10	nim.	NNE	10	nim.	NNE	10	nim.	NNE	10.0
" 22,.....	10	nim.	NE	10	str. nim.	NE	10	nim.	NE	10	nim.	...	10.0
" 23,.....	10	sm-cum. cum-nim.	NE	10	cum-nim.	NE	10	str-cum.	NE	10	str-cum.	NE	10.0
" 24,.....	5	cum.	...	10	str-cum.	SSW	10	str.	...	10	nim.	...	6.8
" 25,.....	0	...	...	0	...	...	0	...	...	0	...	...	2.1
" 26,.....	0	...	...	0	...	...	0	...	...	0	...	...	0.0
" 27,.....	0	...	...	0	...	...	0	...	...	0	...	...	0.0
" 28,.....	0	...	...	0	...	...	0	...	...	0	...	...	0.0
" 29,.....	0	...	...	0	...	...	0	...	...	0	...	...	0.0
" 30,.....	10	str.	...	10	str.	...	10	str-cum.	...	10	cum..	SE	8.7
" 31,.....	10	str-cum.	ESE	4	sm-cum.	WSW	1	sm-cum.	W	3	sm-cum.	W	7.3
Mean,.....	3.0	...	...	3.0	...	...	2.9	...	...	3.4	...	...	3.1

TABLE XIII.

RAINFALL AT DIFFERENT STATIONS.

DATE.	OBSERVATORY.		STONE CUTTERS' ISLAND.		VICTORIA PEAK. Amount.
	Amount.	Duration.	Amount.		
1886.	ins.	hrs.	ins.		ins.
Dec. 1,.....
" 2,.....
" 3,.....
" 4,.....
" 5,.....
" 6,.....
" 7,.....
" 8,.....
" 9,.....
" 10,.....
" 11,.....
" 12,.....
" 13,.....	0.160	8	0.16		0.26
" 14,.....
" 15,.....
" 16,.....
" 17,.....
" 18,.....
" 19,.....
" 20,.....	0.035	3	...		...
" 21,.....	0.470	20	0.28		0.94
" 22,.....	1.110	22	6.72		1.46
" 23,.....
" 24,.....
" 25,.....
" 26,.....
" 27,.....
" 28,.....
" 29,.....	...	1	...		..
" 30,.....
" 31,.....
Total,.....	1.775	54	1.16		2.66

W. DOBERCK,
Government Astronomer.

Hongkong Observatory, 18th January, 1887.

Appendix A.

ON ONE YEAR'S OBSERVATIONS OF THERMOMETERS EXPOSED IN STEVENSON'S SCREEN.

It is known from papers read before the Royal Meteorological Society and from other sources, that minor alterations in the dimensions or form of Stevenson's screen have no important influence on the readings of the thermometers, although even in England the observations made in screens can scarcely be taken as perfectly accurate. But at any rate the mean corrections must be very much smaller there than in the torrid zone, and may perhaps amount to next to nothing where the screen is placed in a well exposed situation. But as the thermographic thermometers are exposed in screens fixed on the walls of the Observatories, the thermograms must at times require larger corrections, particularly in places, where the thermograph is not fixed in a position so favourable as e.g. at Kew. These circumstances could be investigated by forming thermometric windroses, for whenever the screen is sheltered by the building the correction must increase, even when the thermograph is placed in a small detached hut.

A Stevenson's screen was erected here at the end of 1883, as explained in *Observations and Researches made in 1884*, in a well exposed situation on the Observatory hill. It is sheltered by buildings or trees at a distance between NE and NW (from which quarter the wind seldom blows) and the view is unobstructed in any other quarter. The readings have been made at the same time as the accurate air temperatures were determined by aid of the rotating thermometer and monthly mean corrections have been obtained by comparison with the data published in the *Monthly Weather Reports*. These corrections may be applied to the observations made in wooden screens lately erected at the lighthouses, etc. in this neighbourhood.

The maximum temperature registered in Stevenson's screen is too high, especially during the months when the sky is generally clear. During the months of November and December the correction was further increased here owing to the screen being slightly sheltered from northerly winds. The correction to the temperature read off at 10 a. is larger than at 4 p. owing to the greater radiation which heats the screen, the highest black bulb temperature generally occurring at or shortly before noon. The minimum temperature is too low owing to the great radiating power of the white lead with which it is painted, which also is the cause of the heavy dew so frequently found on the screen. The temperature at 10 p. is too low for the same reason.

The error of the temperatures registered during the day is however much greater than during the night, owing to the convection currents of heated air from the ground. Puffs or lulls in the wind cause the air particles, which are longer or shorter times in contact with heated objects (the ground, the louvres of the screen, etc.), to assume different temperatures. The vibrations seen on the thermograms during the day time are thus produced, though they depend also to some extent upon clouds, that diminish the radiation while passing over. There is always some uncertainty attached to the extreme temperatures, as the air is not quite uniformly hot, more especially is the maximum slightly uncertain. On a hot day objects are seen at any rate in a telescope somewhat unsteady through strata of air of different temperatures.

The thermometers used were those recommended by the Meteorological Office. Their bulbs are too small and thermometers with long cylindrical bulbs are more sensitive.

The absolute and relative humidity were obtained by aid of Blanford's tables, which are perhaps not strictly applicable as he fanned his thermometers, and it is known that anything that causes the layer of air attached to the damp bulb to be renewed, lowers the damp bulb temperature. In these observations the bulb was wetted by aid of a bottle of water permanently fixed beside the thermometer. If the bulb is wetted before every observation, it falls lower.

That the corrections come out so small as those exhibited below, must be attributed to the circumstance, that the screen was well placed. At 10 p. the correction is greater than during the day owing to the minimum of windforce generally occurring about that hour. The corrections are greater when the radiation is great and the humidity low.

Observations sufficient to construct tables for calculating the humidity of the air from observations made with the rotating thermometer were contemplated by me last year, but were not carried out for want of funds. They will however now be shortly commenced, sufficient funds having been placed at my disposal for this purpose.

Corrections to Temperatures observed in Stevenson's Screen in Hongkong, and reduction to mean of 24 hourly readings of true temperature.

Month.	Dry Bulb.			Damp Bulb.			Maximum.	Minimum.	Reduction to Mean of 24 hours.	
	10 a ° o	4 p ° o	10 p ° o	10 a ° o	4 p ° o	10 p ° o			10 a —	Max. ° o
1885.										
July,	-0.6	-0.4	+0.2	-0.9	-0.7	-0.5	-1.3	+0.5	-0.0	-0.6
August,	-0.6	-0.1	+0.2	-0.8	-0.7	-0.4	-1.1	+0.4	-0.4	-0.1
September,	-1.5	-0.4	+0.4	-1.2	-0.7	-0.4	-1.9	+0.8	-0.8	-1.1
October,	-1.7	-0.6	+0.3	-1.5	-0.8	-0.8	-2.4	+0.6	-1.2	-1.0
November,	-2.2	-1.1	+0.5	-1.8	-1.3	-0.9	-3.3	+0.9	-1.1	-1.9
December,	-1.9	-1.3	+0.4	-1.6	-1.1	-0.7	-3.2	+0.6	-1.1	-1.1
1886.										
January,	-1.4	-1.1	+0.2	-1.6	-1.2	-0.6	-2.5	+0.6	-0.8	-1.0
February,	-0.4	-0.5	+0.1	-0.6	-0.6	-0.4	-1.4	+0.2	-0.4	-0.6
March,	-0.4	-0.5	+0.1	-0.4	-0.4	-0.4	-1.6	+0.2	-0.5	-1.2
April,	-0.6	-0.6	0.0	-0.5	-0.3	-0.3	-1.4	+0.2	-0.6	-0.8
May,	-1.0	-0.8	+0.1	-1.3	-0.9	-1.0	-1.5	+0.4	-0.7	-1.1
June,	-0.9	-0.4	+0.1	-0.6	-0.6	-0.2	-1.2	+0.8	-0.7	-0.5
Mean,	-1.1	-0.6	+0.2	-1.1	-0.8	-0.5	-1.9	+0.5	-0.7	-0.9

Relative humidity and tension of aqueous vapour (calculated by aid of Blanford's tables) from observations made in Stevenson's Screen and corrections thereto.

Month.	Humidity.			Correction.			Tension.			Correction.		
	10 a ° o	4 p ° o	10 p ° o	10 a ° o	4 p ° o	10 p ° o	10 a ins.	4 p ins.	10 p ins.	10 a ins.	4 p ins.	10 p ins.
1885.												
July,	83	79	89	-2	-1	-2	0.908	0.903	0.903	-0.031	-0.026	-0.02
August,	82	82	91	-1	-2	-3	.894	.897	.898	.027	.028	.02
September,	75	76	89	+1	-1	-5	.811	.807	.829	.031	.025	.021
October,	64	68	78	0	-1	-5	.620	.633	.664	.027	.017	.02
November,	55	58	71	0	-1	-7	.428	.450	.465	.019	.018	.02
December,	65	66	80	0	0	-6	.432	.435	.452	.014	.006	.01
1886.												
January,	64	63	76	-2	-1	-5	.345	.350	.369	.022	.014	.01
February,	74	73	83	-1	-2	-4	.318	.324	.339	.006	-.005	-.00
March,	85	84	91	0	0	0	.493	.500	.504	.001	+.001	+.00
April,	84	83	91	0	+2	-1	.633	.631	.646	.008	-.001	-.00
May,	79	78	90	-2	-2	-4	.752	.750	.786	.033	.019	.03
June,	79	80	87	0	-2	-1	.858	.852	.855	.013	-.019	-.00
Mean, .....	...	...	...	-1	-1	-4	...	...	...	-0.019	-0.015	-0.01

JULY, 1885.

AUGUST, 1885.

Date.	Dry Bulb.			Damp Bulb.			Max.	Min.	Date.	Dry Bulb.			Damp Bulb.			Max.	Min.
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.				10 a.	4 p.	10 p.	10 a.	4 p.	10 p.		
July 1,...	84.3	84.4	80.9	80.5	80.5	79.1	87.7	79.9	Aug. 1,...	82.6	79.2	78.6	79.1	76.4	77.2	84.1	75.3
" 2,..."	75.2	79.5	78.7	74.6	77.0	77.5	81.1	74.6	" 2,..."	77.5	81.9	78.5	76.7	77.8	76.5	83.6	74.3
" 3,..."	84.1	83.7	83.2	80.5	80.1	79.4	84.6	78.5	" 3,..."	86.4	79.4	80.6	81.5	77.2	78.3	87.1	74.5
" 4,..."	80.6	82.4	79.2	77.9	79.0	77.5	83.6	78.2	" 4,..."	74.6	76.3	75.6	74.3	75.5	74.5	82.0	74.2
" 5,..."	74.6	79.0	78.5	74.0	75.6	75.5	82.6	74.5	" 5,..."	80.0	82.4	79.2	77.9	79.6	77.5	83.2	75.2
" 6,..."	74.4	81.8	81.9	74.2	78.6	79.2	82.5	73.2	" 6,..."	86.2	85.9	79.6	80.3	80.0	77.6	88.0	77.7
" 7,..."	83.8	83.5	82.3	79.5	79.6	79.3	84.6	81.4	" 7,..."	84.2	87.6	79.3	78.6	78.8	77.7	89.1	77.1
" 8,..."	83.9	85.1	81.9	79.6	80.0	78.9	85.9	81.4	" 8,..."	82.7	84.3	79.2	78.3	77.6	76.9	87.1	77.0
" 9,..."	83.3	84.6	82.0	79.4	79.0	78.6	85.9	81.3	" 9,..."	84.4	83.5	79.0	77.9	77.2	76.6	86.2	75.8
" 10,..."	83.0	82.6	81.8	78.1	79.3	79.0	84.4	79.9	" 10,..."	81.3	80.1	76.7	76.2	76.6	75.0	82.9	76.6
" 11,..."	84.8	83.0	80.6	79.6	78.5	78.0	86.5	79.9	" 11,..."	81.2	80.1	76.2	76.5	75.9	74.6	82.7	75.6
" 12,..."	79.5	82.1	77.3	75.9	78.7	74.9	84.2	76.5	" 12,..."	85.4	82.6	79.6	77.6	77.9	77.2	87.1	73.2
" 13,..."	81.5	81.8	77.7	77.9	71.5	76.6	83.5	76.9	" 13,..."	81.8	82.0	79.1	77.4	77.7	76.4	83.0	73.9
" 14,..."	83.3	83.6	77.8	78.1	76.2	76.2	84.4	77.0	" 14,..."	82.9	83.3	81.2	78.1	78.6	78.5	84.3	78.8
" 15,..."	83.2	85.6	77.8	76.7	78.1	74.1	86.8	75.3	" 15,..."	83.8	82.9	80.8	77.7	78.0	78.0	84.5	78.7
" 16,..."	85.2	87.4	76.9	77.6	76.0	74.3	87.6	74.9	" 16,..."	82.0	82.4	79.6	75.9	76.1	75.2	85.5	78.7
" 17,..."	84.8	85.9	80.4	79.0	79.3	77.3	89.0	75.8	" 17,..."	79.6	78.4	79.7	77.8	75.3	77.0	81.0	75.5
" 18,..."	85.3	85.4	80.8	79.0	79.3	76.6	88.7	78.5	" 18,..."	76.9	77.0	79.5	75.3	75.6	77.3	80.1	75.1
" 19,..."	84.9	90.6	81.9	79.7	81.9	79.4	91.1	79.8	" 19,..."	80.8	82.1	79.7	77.1	78.9	78.6	83.3	78.9
" 20,..."	88.4	88.3	80.8	81.7	81.2	77.0	91.9	80.2	" 20,..."	83.9	82.0	78.9	79.0	78.6	77.2	84.4	78.9
" 21,..."	85.2	84.3	79.7	79.9	78.5	77.5	85.5	77.9	" 21,..."	81.9	81.6	79.0	78.9	79.0	77.9	86.0	77.9
" 22,..."	84.6	86.6	80.8	78.2	78.9	78.4	90.2	77.1	" 22,..."	84.3	88.2	79.8	78.6	79.3	78.0	88.6	76.1
" 23,..."	85.8	82.3	78.3	79.4	78.6	76.1	90.5	77.9	" 23,..."	82.5	87.6	75.8	80.8	81.5	72.8	89.0	74.9
" 24,..."	86.4	86.8	82.5	79.8	79.7	78.6	89.7	77.8	" 24,..."	83.9	86.3	85.3	77.5	79.5	79.9	88.0	75.9
" 25,..."	76.3	83.3	79.3	75.4	78.9	77.7	84.7	75.7	" 25,..."	86.5	83.2	76.7	79.2	79.8	76.1	87.8	76.0
" 26,..."	83.3	80.5	76.3	79.0	70.7	75.0	84.4	76.2	" 26,..."	83.3	83.3	81.8	78.2	78.5	79.1	81.6	74.2
" 27,..."	83.5	84.6	79.9	78.7	79.5	77.9	87.7	75.1	" 27,..."	80.4	83.9	80.9	77.1	79.2	78.7	84.6	77.4
" 28,..."	82.8	82.2	80.1	79.1	78.4	78.0	87.1	76.1	" 28,..."	79.4	74.9	76.6	77.0	73.6	75.7	81.6	74.9
" 29,..."	75.8	77.2	75.7	75.6	76.4	75.0	89.2	73.7	" 29,..."	74.4	77.3	75.9	74.0	76.2	75.1	77.6	74.3
" 30,..."	80.7	78.3	76.4	77.5	76.8	75.5	82.7	74.2	" 30,..."	76.0	79.9	77.2	75.0	77.3	76.2	81.2	74.9
" 31,..."	75.3	77.2	77.3	74.5	75.0	76.4	80.5	73.8	" 31,..."	84.9	80.0	79.2	79.9	78.0	77.9	86.3	74.5
Mean,...	82.2	83.3	79.6	78.1	78.3	77.2	85.8	77.2	Mean,...	81.9	82.0	79.0	77.7	77.8	76.9	84.7	76.0

SEPTEMBER, 1885.

OCTOBER, 1885.

Date.	Dry Bulb.			Damp Bulb.			Max.	Min.	Date.	Dry Bulb.			Damp Bulb.			Max.	Min.
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.				10 a.	4 p.	10 p.	10 a.	4 p.	10 p.		
Sept. 1,...	83.3	83.1	79.7	77.9	77.8	77.9	86.4	76.8	Oct. 1,...	82.6	79.6	77.5	75.6	74.1	73.7	84.0	74.7
" 2,..."	84.2	82.4	77.8	79.5	78.8	75.5	86.3	76.4	" 2,..."	84.3	81.0	77.9	75.1	74.3	71.1	85.2	74.1
" 3,..."	82.2	85.2	79.9	77.2	77.0	77.7	85.9	76.6	" 3,..."	83.3	80.7	77.4	74.7	73.5	74.4	84.6	76.5
" 4,..."	85.5	85.9	79.2	79.0	78.8	78.0	88.9	77.1	" 4,..."	82.8	81.4	76.7	75.3	74.8	74.1	84.1	76.6
" 5,..."	86.2	79.6	78.7	80.6	77.0	76.9	87.4	77.4	" 5,..."	80.9	81.5	78.8	76.2	76.6	75.5	85.6	75.0
" 6,..."	84.9	84.1	79.4	79.3	78.9	77.2	87.2	76.3	" 6,..."	87.6	83.9	78.4	76.2	75.7	67.1	88.8	74.8
" 7,..."	75.9	81.0	78.5	75.4	77.2	76.8	81.8	75.7	" 7,..."	82.4	80.5	74.2	67.1	68.9	67.6	84.8	71.4
" 8,..."	81.5	79.5	77.7	77.0	77.2	76.8	81.2	75.3	" 8,..."	68.6	67.6	69.2	67.6	66.9	68.2	75.1	67.3
" 9,..."	77.2	77.2	74.7	74.7	75.2	74.2	83.7	74.5	" 9,..."	75.7	75.6	76.4	71.7	70.7	69.7	80.1	68.7
" 10,..."	77.1	79.6	76.3	75.5	76.9	75.2	79.8	73.6	" 10,..."	78.5	77.2	76.4	68.7	70.2	69.5	79.3	74.8
" 11,..."	76.7	80.3	78.8	74.7	75.3	76.2	80.6	74.5	" 11,..."	77.6	78.0	76.8	70.2	70.1	71.0	79.4	73.9
" 12,..."	83.2	82.1	78.5	77.0	76.0	75.3	83.9	77.0	" 12,..."	77.8	77.8	75.7	71.6	71.8	72.7	79.5	74.9
" 13,..."	82.5	78.4	77.1	75.6	75.0	74.2	84.8	76.5	" 13,..."	80.0	78.6	74.8	72.4	72.1	71.7	81.8	72.5
" 14,..."	83.5	84.4	75.2	67.9	72.6	70.4	86.6	75.2	" 14,..."	84.6	84.4	77.6	74.2	75.6	75.1	87.8	72.7
" 15,..."	80.6	81.6	76.1	70.6	72.5	72.5	83.1	71.5	" 15,..."	79.5	78.5	75.6	71.1	71.6	71.0	82.1	75.2
" 16,..."	82.2	76.4	73.7	72.8	70.8	70.1	83.8	71.8	" 16,..."	76.6	77.1	75.7	70.1	69.7	70.6	78.1	72.7
" 17,..."	76.2	77.6	*77.8	75.3	73.1	*74.7	80.1	72.6	" 17,..."	76.4	75.9	75.5	67.4	65.9	70.0	79.4	71.7
" 18,..."	78.1	78.6	*76.5	74.1	72.1	*72.1	80.8	75.8	" 18,..."	76.8	74.7	74.3	70.2	69.5	71.1	77.8	72.0
" 19,..."	80.1	79.3	*76.5	74.9	73.7	*73.3	82.1	76.3	" 19,..."	79.3	77.9	73.8	69.9	71.6	71.2	80.4	72.5
" 20,..."	79.8	81.0	77.0	75.3	76.0	74.4	83.7	73.5	" 20,..."	77.6	76.8	75.3	71.1	70.7	71.6	78.9	72.4
" 21,..."	82.8	80.8	77.8	76.5	74.1	74.5	83.7	75.0	" 21,..."	76.5	76.2	74.9	71.3	70.6	71.7	78.0	73.8
" 22,..."	82.6	81.5	76.3	75.1	73.3	73.4	84.4	76.2	" 22,..."	80.1	76.6	71.7	71.7	69.8	68.1	80.9	71.7
" 23,..."	85.2	80.6	78.4	79.1	77.1	77.0	86.3	75.5	" 23,..."	77.6	75.6	67.1	68.8	66.6	60.3	81.1	67.0
" 24,..."	84.1	84.4	78.6	79.0	77.6	76.5	86.7	76.2	" 24,..."	73.4	72.9	70.4	62.4	61.6	59.1	78.4	63.6
" 25,..."	85.4	86.2	79.7	79.0	79.3	76.8	88.6	77.4	" 25,..."	72.6	73.1	66.3	60.9	61.4	61.6	77.1	65.3
" 26,..."	86.8	79.8	77.5	75.3	75.5	75.1	87.3	75.2	" 26,..."	75.3	74.6	71.8	60.9	61.8	64.1	77.2	63.7
" 27,..."	79.2	77.4	75.8	74.0	73.3	73.0	82.3	72.9	" 27,..."	75.8	74.5	74.6	62.8	65.1	68.6	76.8	70.3
" 28,..."	82.6	80.8															

NOVEMBER, 1885.

DECEMBER, 1885.

Date.	Dry Bulb.			Damp Bulb.			Max.	Min.	Date.	Dry Bulb.			Damp Bulb.			Max.	Min.
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.				10 a.	4 p.	10 p.	10 a.	4 p.	10 p.		
Nov. 1...	78.3	75.7	72.9	72.2	71.2	71.3	79.9	72.6	Dec. 1...	68.6	68.8	67.2	64.1	65.2	65.2	73.1	64.8
" 2...	80.4	77.8	72.4	73.4	72.8	70.5	82.9	70.8	" 2...	74.5	70.7	68.3	68.4	66.5	63.9	76.6	66.5
" 3...	78.2	75.1	74.3	73.0	72.1	72.2	79.5	72.3	" 3...	76.6	72.6	68.4	68.4	66.4	65.4	79.9	65.9
" 4...	73.5	77.1	64.6	61.8	60.6	50.4	79.6	64.5	" 4...	68.9	69.0	66.7	62.8	63.4	64.5	72.4	64.7
" 5...	68.3	69.0	66.9	53.5	57.5	60.2	71.0	57.2	" 5...	74.6	71.4	68.4	67.1	66.8	66.2	75.7	65.4
" 6...	70.6	70.3	67.8	60.4	60.7	61.3	76.1	63.9	" 6...	67.6	67.1	64.3	64.5	64.3	61.6	69.4	64.2
" 7...	76.9	74.9	69.7	65.2	64.2	62.4	78.6	66.8	" 7...	66.3	66.2	64.9	60.9	60.3	60.9	69.1	62.1
" 8...	77.8	76.8	68.9	64.4	67.6	64.1	81.5	66.8	" 8...	71.4	68.5	65.8	63.9	62.5	63.1	73.8	62.8
" 9...	78.6	77.3	70.0	70.2	69.5	67.2	83.2	65.8	" 9...	66.5	67.6	66.9	63.2	64.4	65.7	69.5	65.1
" 10...	77.4	75.1	70.3	71.4	68.8	67.6	77.9	68.2	" 10...	71.3	70.9	66.6	66.4	66.9	65.2	75.0	61.9
" 11...	77.6	73.0	64.1	68.2	67.9	59.4	78.0	63.9	" 11...	73.3	69.6	63.9	67.7	65.3	59.2	78.2	63.3
" 12...	65.6	67.0	57.1	55.5	56.4	50.1	70.5	57.0	" 12...	63.4	64.5	53.2	54.1	53.6	46.1	67.9	53.1
" 13...	62.7	64.9	62.9	52.8	56.1	55.0	67.1	53.8	" 13...	60.1	63.6	56.2	51.1	52.5	50.6	65.6	49.8
" 14...	72.6	70.0	69.3	60.3	61.4	64.4	75.5	58.9	" 14...	62.6	63.5	62.4	57.3	57.4	58.0	66.3	55.1
" 15...	73.4	72.5	69.8	64.2	64.8	65.1	75.2	65.7	" 15...	71.4	75.1	62.2	60.5	59.5	53.4	79.0	59.4
" 16...	72.6	72.3	68.9	64.9	65.5	66.3	75.6	66.3	" 16...	66.6	69.2	58.2	55.1	58.9	54.8	71.6	54.7
" 17...	75.6	75.6	70.6	66.3	67.7	67.2	79.5	68.8	" 17...	66.9	67.4	58.7	54.4	55.3	54.4	71.7	56.9
" 18...	77.6	73.4	70.0	67.3	66.7	64.6	80.6	68.4	" 18...	65.4	66.6	60.9	57.1	56.2	56.6	72.3	57.8
" 19...	71.7	75.3	65.5	61.1	62.4	56.0	78.6	65.3	" 19...	68.6	64.3	64.3	58.5	61.1	62.2	68.9	58.9
" 20...	68.6	69.1	66.8	57.7	59.2	60.5	71.8	61.8	" 20...	65.5	64.6	64.0	61.4	60.8	62.8	66.3	61.8
" 21...	69.3	69.6	65.9	59.7	59.4	58.3	73.8	64.6	" 21...	67.7	67.3	66.2	62.6	61.4	64.1	71.5	62.8
" 22...	69.8	70.6	66.5	61.1	59.4	59.3	72.6	63.8	" 22...	65.1	65.6	64.7	62.5	62.6	64.4	67.1	63.1
" 23...	72.6	73.1	63.9	61.4	63.3	57.2	77.6	63.5	" 23...	72.6	73.6	67.7	67.5	68.0	66.7	78.7	64.4
" 24...	65.1	64.6	60.9	56.4	54.9	54.1	69.6	60.8	" 24...	71.8	68.3	67.6	68.4	65.5	66.6	73.0	60.6
" 25...	59.6	62.6	62.2	56.2	57.2	58.2	64.3	54.2	" 25...	67.1	65.5	61.7	66.2	65.1	59.5	67.8	61.1
" 26...	65.6	65.7	62.7	58.5	57.9	58.6	70.6	61.5	" 26...	61.6	64.6	54.5	54.4	57.6	50.8	68.9	54.1
" 27...	66.6	70.0	61.3	52.0	55.8	51.6	72.1	56.8	" 27...	59.7	63.6	56.2	49.6	50.2	45.7	65.8	48.8
" 28...	66.6	65.6	59.4	54.0	54.9	55.1	70.0	56.1	" 28...	59.6	61.1	53.3	48.5	50.1	47.8	63.0	49.1
" 29...	68.8	67.4	65.2	58.5	58.8	61.1	70.7	57.7	" 29...	59.4	58.6	56.3	51.4	50.4	52.6	60.6	50.8
" 30...	67.6	67.6	*64.9	59.4	60.3	*59.8	70.1	63.7	" 30...	58.2	59.5	60.1	51.8	53.2	53.7	60.4	55.9
.....	....	....	....	....	....	....	....	....	.....	59.0	60.6	57.9	53.3	53.6	58.9	63.1	51.8
Mean,...	71.7	71.3	66.5	62.0	62.5	61.0	75.1	63.4	Mean,...	66.8	66.8	62.5	60.1	60.2	58.9	70.1	59.5

JANUARY, 1886.

FEBRUARY, 1886.

Date.	Dry Bulb.			Damp Bulb.			Max.	Min.	Date.	Dry Bulb.			Damp Bulb.			Max.	Min.
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.				10 a.	4 p.	10 p.	10 a.	4 p.	10 p.		
Jan. 1...	63.9	66.6	59.4	56.5	58.9	52.1	70.0	53.8	Feb. 1...	50.8	50.8	50.3	41.3	40.4	44.0	53.7	33.1
" 2...	63.3	64.8	56.9	52.7	54.6	48.3	68.7	52.3	" 2...	51.6	52.6	52.7	44.4	45.2	48.5	53.6	49.9
" 3...	63.5	66.6	56.3	50.8	52.5	52.2	68.4	53.2	" 3...	52.2	51.3	51.3	48.1	46.5	49.2	52.8	50.1
" 4...	61.8	65.6	56.9	49.6	51.0	53.0	68.7	51.8	" 4...	50.4	52.8	54.3	49.4	51.0	53.2	54.5	49.9
" 5...	60.8	60.4	58.8	49.2	48.6	51.3	64.8	49.9	" 5...	56.2	58.1	59.7	55.5	57.6	59.4	60.0	53.8
" 6...	59.6	61.6	60.5	53.0	54.5	55.6	63.5	54.4	" 6...	59.6	61.6	52.2	55.9	54.5	48.0	68.2	52.1
" 7...	64.6	65.9	62.2	57.7	58.6	57.6	70.1	60.1	" 7...	49.6	52.0	50.2	44.4	45.2	44.6	54.1	44.2
" 8...	69.9	67.8	62.9	59.6	56.3	58.5	70.4	58.8	" 8...	50.7	53.0	51.8	43.9	46.4	47.1	56.5	46.8
" 9...	73.6	69.0	63.9	60.2	60.1	59.2	78.2	60.5	" 9...	52.6	53.5	54.6	48.5	49.4	52.0	54.8	51.3
" 10...	67.9	64.8	62.3	58.1	58.2	58.5	70.6	62.2	" 10...	54.3	54.2	53.1	53.4	53.5	52.9	54.7	53.0
" 11...	69.0	72.7	63.0	60.5	62.2	58.7	75.7	57.1	" 11...	54.6	51.3	49.3	51.2	48.4	46.1	55.6	48.9
" 12...	58.6	59.6	58.8	53.1	53.3	54.3	63.1	57.5	" 12...	54.0	53.6	52.9	49.3	49.6	49.1	51.2	47.9
" 13...	61.1	61.6	60.9	54.7	55.5	57.2	63.0	55.7	" 13...	54.6	56.6	53.6	50.1	50.5	50.6	58.6	52.2
" 14...	63.6	68.3	57.4	54.5	55.6	50.1	71.4	57.2	" 14...	56.1	55.4	55.3	50.6	50.2	51.9	57.3	52.9
" 15...	59.5	58.8	59.3	53.5	54.4	55.8	60.6	53.7	" 15...	58.0	57.2	57.8	52.9	54.4	54.8	58.7	51.1
" 16...	59.6	60.6	60.3	55.5	57.5	58.7	61.6	57.2	" 16...	55.6	55.7	51.8	52.3	52.6	51.1	58.0	51.9
" 17...	62.6	64.5	59.5	58.9	59.1	56.8	65.3	59.3	" 17...	50.6	51.1	48.9	47.5	48.3	47.9	52.5	47.5
" 18...	62.4	60.6	58.8	56.5	56.2	54.5	63.1	54.8	" 18...	51.1	52.7	52.4	49.3	50.3	51.1	53.0	48.5
" 19...	61.7	60.6	60.1	56.5	56.0	57.1	63.6	56.9	" 19...	56.4	56.1	52.4	54.1	53.4	52.0	57.7	52.9
" 20...	59.1	62.2	60.5	56.9	58.5	58.6	64.6	55.8	" 20...	56.7	60.6	54.3	53.3	56.1	51.2	62.2	51.5
" 21...	62.0	61.7	61.3	60.4	60.4	62.5	62.5	59.8	" 21...	56.5	56.4	50.8	51.6	51.8	48.1	56.8	50.0
" 22...	61.6	62.8	63.3	60.6	61.9	62.3	64.1	60.5	" 22...	54.6	55.9	50.4	48.0	49.3	45.7	59.6	46.7
" 23...	65.2	63.8	59.8	60.4	57.8	55.1	70.4	59.5	" 23...	52.3	54.6	51.7	46.5	49.2	48.2	58.4	48.8
" 24...	57.3	57.6	58.2	55.3	56.6	57.7	60.4	56.6	" 24...	51.6	59.7	56.1	49.5	55.4	55.5	60.1	48.8
" 25...	59.7	60.1	58.9	59.5	59.8	58.4	60.6	57.7	" 25...	61.1	62.4	59.6	58.4	58.4	58.5	64.9	55.9
" 26...	56.6	55.7	53.3	53.7	52.4	51.5	59.6	52.9	" 26...	61.7	58.4	56.0	59.5	57.6	55.7	65.0	54.8
" 27...	56.6	57.6	*55.2	51.7	52.5	*51.9	58.4	50.6	" 27...	56.6	60.8	58.4	54.8	56.3	54.0	63.0	54.8
" 28...	54.1	54.6	53.8	52.4	52.5	52.2	55.3	53.4	" 28...	56.3	55.7	55.7	53.2	53.6	53.7	58.6	54.7
" 29...	50.4																

MARCH, 1886.

APRIL, 1886.

Date.	Dry Bulb.			Damp Bulb.			Max.	Min.	Date.	Dry Bulb.			Damp Bulb.			Max.	Min.
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.				10 a.	70.5	74.8	71.4	69.4	72.3	70.1	76.2
Mar. 1,...	57.5	60.5	59.6	56.5	58.8	59.5	62.6	55.2	Apr. 1,...	70.5	74.8	71.4	69.4	72.3	70.1	76.2	66.2
" 2,...	64.6	63.6	64.6	63.4	63.4	64.5	66.1	59.3	" 2,...	71.8	71.6	69.6	70.2	69.5	68.8	76.9	68.4
" 3,...	65.4	66.7	61.7	64.4	63.9	61.6	70.7	60.4	" 3,...	68.5	69.1	68.4	66.0	67.3	67.7	70.4	64.5
" 4,...	58.6	61.6	59.4	58.1	58.5	58.0	64.7	57.4	" 4,...	70.1	73.6	69.9	69.5	70.9	69.6	76.3	66.6
" 5,...	56.7	59.4	56.9	55.8	56.0	54.1	59.7	55.8	" 5,...	72.3	75.5	70.5	71.2	72.2	70.1	77.1	69.3
" 6,...	61.6	58.6	56.7	56.2	55.4	53.1	63.1	55.1	" 6,...	70.6	73.5	68.3	68.3	69.1	67.0	74.7	68.2
" 7,...	58.3	60.4	58.9	53.5	55.8	55.1	62.1	56.3	" 7,...	68.4	72.8	70.0	67.0	68.6	68.4	75.3	66.7
" 8,...	69.6	67.6	65.8	62.4	62.4	61.1	73.6	58.6	" 8,...	76.5	76.5	70.9	70.2	70.3	68.9	78.7	69.1
" 9,...	62.9	65.7	62.0	61.4	63.0	62.0	69.4	61.8	" 9,...	70.6	71.0	69.9	66.7	68.1	68.6	72.8	66.9
" 10,...	59.5	60.6	58.8	58.4	56.5	57.1	62.4	58.6	" 10,...	76.7	74.6	71.1	71.8	71.0	70.3	77.9	68.9
" 11,...	60.6	59.7	59.3	55.4	55.4	57.7	61.5	55.8	" 11,...	75.4	75.6	73.0	71.5	71.8	71.7	78.4	69.4
" 12,...	61.1	62.6	63.9	58.3	60.4	62.7	65.6	56.6	" 12,...	75.3	73.4	69.7	72.4	70.3	69.2	76.0	69.6
" 13,...	68.6	73.1	65.8	65.5	68.1	65.1	78.5	62.0	" 13,...	69.8	68.0	66.4	69.3	67.4	65.7	70.7	66.3
" 14,...	60.7	60.5	62.6	59.4	60.0	62.1	67.0	58.7	" 14,...	67.4	67.1	67.6	66.3	64.4	65.1	67.8	65.5
" 15,...	64.5	71.4	65.8	63.8	68.3	65.7	72.1	61.8	" 15,...	66.5	67.0	67.7	65.5	65.4	66.1	71.4	64.8
" 16,...	67.6	68.9	66.4	67.1	67.6	66.1	70.9	64.9	" 16,...	66.6	66.0	66.7	65.8	65.2	65.9	68.2	65.6
" 17,...	70.1	68.7	64.4	67.5	66.4	64.3	73.7	63.3	" 17,...	66.6	67.6	68.3	66.2	67.1	67.7	68.6	66.0
" 18,...	68.5	67.8	64.3	66.2	65.2	63.7	71.7	63.7	" 18,...	69.3	71.6	69.4	67.6	68.3	66.2	73.6	67.8
" 19,...	70.6	68.6	63.4	67.3	65.6	63.3	73.2	63.0	" 19,...	68.6	69.4	68.7	63.0	62.4	62.6	71.1	66.4
" 20,...	62.1	65.6	64.2	59.6	61.4	62.0	67.5	59.7	" 20,...	61.1	64.9	66.1	58.8	60.8	62.4	68.8	59.5
" 21,...	70.3	69.8	65.8	64.7	66.0	64.8	73.5	63.8	" 21,...	71.3	70.5	69.3	66.2	66.0	67.6	72.7	65.4
" 22,...	69.6	71.6	68.1	67.4	68.4	67.3	73.1	65.5	" 22,...	69.6	70.1	69.8	66.3	67.4	68.1	70.5	68.3
" 23,...	75.1	74.1	64.4	71.6	70.8	63.1	76.5	63.8	" 23,...	71.6	71.9	71.8	69.9	70.3	71.3	74.0	69.5
" 24,...	56.6	54.9	53.2	54.5	53.1	51.7	64.9	52.8	" 24,...	78.7	67.8	67.7	75.4	67.4	67.0	78.9	67.4
" 25,...	53.9	53.6	51.9	51.9	51.2	51.1	56.1	51.3	" 25,...	76.7	71.6	69.4	67.1	65.5	64.0	77.0	67.3
" 26,...	56.2	57.0	53.8	53.0	53.9	52.7	60.1	51.0	" 26,...	69.4	69.6	68.9	58.8	62.8	64.9	70.6	66.4
" 27,...	58.6	57.7	55.1	53.9	52.3	54.4	59.0	53.5	" 27,...	71.1	69.6	68.4	65.2	65.2	65.2	73.1	66.0
" 28,...	60.6	59.6	58.7	57.4	56.2	56.8	62.5	54.8	" 28,...	67.9	65.6	66.9	64.4	64.3	64.9	68.6	65.4
" 29,...	61.6	60.4	60.9	56.8	56.9	57.9	62.7	58.4	" 29,...	69.4	73.6	66.7	66.3	67.0	64.9	74.6	65.9
" 30,...	62.6	64.2	63.7	59.4	61.2	62.2	67.2	59.4	" 30,...	77.4	75.6	69.3	70.5	70.3	68.5	81.1	64.4
" 31,...	65.8	73.7	68.7	65.2	70.7	66.8	74.2	62.7	.....	....	....	....	....	....	....	....
Mean,...	63.2	64.1	61.6	60.5	61.1	60.2	67.3	58.9	Mean,...	70.9	71.0	69.1	67.6	67.6	67.3	73.7	66.7

MAY, 1886.

JUNE, 1886.

Date.	Dry Bulb.			Damp Bulb.			Max.	Min.	Date.	Dry Bulb.			Damp Bulb.			Max.	Min.
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.				10 a.	70.5	74.8	71.4	69.4	72.3	70.1	76.2
May 1,...	73.6	72.4	69.7	65.6	65.3	67.6	74.5	66.4	June 1,...	74.6	75.6	75.6	73.7	74.2	74.2	79.7	73.8
" 2,...	70.1	70.1	70.0	65.5	67.5	68.0	72.9	68.2	" 2,...	79.6	79.8	77.3	77.5	76.1	76.4	80.3	72.8
" 3,...	73.3	72.5	71.2	70.3	69.3	70.1	73.8	69.7	" 3,...	83.3	83.2	82.0	78.1	78.2	78.0	85.7	76.8
" 4,...	77.3	77.3	73.3	73.7	74.3	73.0	80.6	69.8	" 4,...	77.9	75.9	76.9	76.2	75.2	76.0	82.7	74.7
" 5,...	77.3	79.9	73.2	74.3	74.3	72.5	81.9	71.5	" 5,...	81.6	82.6	79.2	77.0	78.2	77.7	87.5	75.8
" 6,...	69.6	76.3	70.4	66.3	68.0	62.2	77.8	66.5	" 6,...	82.3	79.5	78.9	78.0	76.9	77.0	83.0	78.3
" 7,...	71.7	68.9	69.2	61.7	63.8	65.7	74.6	63.5	" 7,...	81.6	80.9	79.4	77.0	76.8	77.0	83.5	77.6
" 8,...	71.3	72.1	69.9	63.3	63.3	67.1	73.7	66.3	" 8,...	77.6	79.6	78.4	76.3	77.2	76.9	81.5	77.0
" 9,...	72.0	73.6	71.6	66.6	66.3	69.9	74.6	67.7	" 9,...	85.1	82.6	79.4	79.0	78.2	77.8	87.0	77.1
" 10,...	69.3	71.7	72.2	68.8	71.3	72.0	73.3	68.3	" 10,...	87.5	85.5	81.4	80.7	80.2	79.0	88.1	78.8
" 11,...	77.5	78.1	75.4	74.5	75.3	74.6	78.7	71.9	" 11,...	83.7	81.4	80.8	79.3	76.6	73.9	86.8	79.4
" 12,...	78.7	76.6	74.6	76.3	74.6	74.2	80.1	74.4	" 12,...	77.8	77.9	71.8	71.9	72.0	70.8	80.9	71.4
" 13,...	77.8	79.4	75.1	75.3	75.3	74.5	81.8	73.8	" 13,...	70.2	72.6	72.0	69.2	70.4	71.4	73.6	69.3
" 14,...	79.5	78.7	73.7	75.1	75.0	72.5	82.7	73.7	" 14,...	76.2	79.3	75.2	71.9	74.3	70.4	80.6	71.1
" 15,...	73.6	75.7	74.3	70.4	72.3	72.5	78.5	71.4	" 15,...	81.5	83.0	76.9	74.2	75.2	72.9	84.0	72.4
" 16,...	78.4	77.6	74.0	75.0	75.8	74.0	80.5	72.7	" 16,...	84.7	84.6	78.0	74.4	73.6	72.5	88.8	74.5
" 17,...	81.6	83.3	76.8	77.4	76.3	75.1	87.7	73.7	" 17,...	84.6	83.4	78.3	77.0	74.4	75.0	87.6	74.6
" 18,...	86.3	83.1	79.7	79.3	77.3	77.0	87.6	75.6	" 18,...	83.7	81.8	77.9	76.9	75.9	74.3	84.3	76.2
" 19,...	84.6	85.2	78.9	78.3	78.3	78.1	87.0	78.8	" 19,...	80.6	74.0	74.8	76.8	72.5	73.3	81.0	74.0
" 20,...	85.2	85.7	80.1	78.3	78.1	77.1	87.6	78.3	" 20,...	83.3	81.7	78.5	78.5	78.0	76.9	84.0	74.4
" 21,...	85.6	87.4	78.8	78.7	79.1	77.1	87.9	77.5	" 21,...	83.6	84.6	79.1	78.3	79.2	76.8	85.6	77.7
" 22,...	75.6	76.6	76.3	73.3	73.3	74.2	79.0	74.5	" 22,...	84.6	84.6	80.6	79.2	79.0	77.6	86.5	77.9
" 23,...	82.3	84.2	77.1	76.0	76.5	74.6	86.4	73.7	" 23,...	85.6	83.6	81.2	78.2	78.4	78.2	86.4	79.0
" 24,...	84.7	86.3	79.5	78.3	77.3	77.0	89.4	74.9	" 24,...	84.5	84.0	81.4	77.5	77.8	77.2	86.9	79.8
" 25,...	81.1	81.1	78.2	75.8	76.1	75.9	84.7	75.9	" 25,...	80.9	85.2	82.2	77.1	77.6	77.0	86.5	77.9
" 26,...	80.6	79.6	77.7	75.8	75.3	75.6	82.0	75.4	" 26,...	84.6	85.6	81.9	78.2	78.7	77.7	86.9	78.9
" 27,...	76.7	76.3	75.0	72.3	71.3	70.9	77.8	74.9	" 27,...	85.3	84.9	82.3	79.8	79.4	78.0	87.5	80.1
" 28,...	77.7	78.9	76.4	70.5	72.2	7											

Appendix B.

REPORT ON THE TYPHOONS OF 1884 AND 1885.

(With six plates).

Typhoons as a rule originate E or SE of the Philippines in the trough of low pressure between the two high pressure areas in the North Pacific and in Australia, which region is characterised by high sea surface temperature.

Their origin is not quite understood but appears to be connected with an abnormally high temperature and humidity in some place in comparison with the neighbourhood. The hot air expands and ascends over such a place and the heat liberated by the consequent condensation of aqueous vapour enables it to rise still further. The air rising to a higher level in the atmosphere causes there an increase of pressure, in consequence of which the upper air is set in motion towards the circumference of the area in question. Thus a decrease of pressure near the surface of the earth in the hot and damp region is effected, and the surrounding air is impelled towards it. This motion of the air at the earth's surface into the area is of course contemporaneous with the escape of the air above out of the same area, and is further increased by the greater pressure at the surface of the earth in the surrounding area caused by the outflow of air above. Thus it is seen that whenever a limited area is hotter and damper than the neighbourhood, the wind must commence to blow straight in towards its centre, or rather in each spot from high towards low pressure in a direction vertical towards the isobar. But air in motion is in the northern hemisphere deflected towards the right owing to the rotation of the earth except when at or very near the equator, and in consequence we have not traced typhoons nearer to the equator than about nine degrees. It is however possible that they may originate nearer than that to the equator as hurricanes have been encountered at a lower latitude. But at the equator the surrounding air continuing to blow straight towards a barometric depression would soon fill it up. Owing to the reflection towards the right the wind is caused to move in a curved path in towards the centre and the centrifugal force, in consequence developed, still further deflects it from the centre of the low pressure. Also the friction between the wind and the surface of the earth or the more or less disturbed sea surface retards the entrance of air into the central depression, while the upper air, subject to less friction escapes from the upper high-pressure area. Thus we see that once a cyclonal motion is started it tends to increase and to spread outwards.

Of course it is not thereby implied that a typhoon may not originate within an extensive area of low pressure round which the air has already a gyratory motion inwards. But that such a condition is not sufficient to originate a typhoon is frequently instance in the China Sea, when the wind along the southern coast of China is E, in Tonquin N, over the Philippines S and lower down in the China Sea SW, without being followed by a typhoon. That a typhoon may follow on similar circumstances when other additional conditions are fulfilled, is instance in case of Typhoon VI of 1885.

But that a typhoon in the beginning of its existence rather spreads from the centre outwards, than the reverse, is made probable both by the similarity between a typhoon in a very low latitude and a huge waterspout (Comp. e. g. Typhoon IV of 1885) and by the subsequent expansion of the typhoon in its progress. There is however the important difference between a typhoon and a tornado, that the latter is taller than it is broad, while the height of the former does certainly not reach four miles up, while its horizontal diameter may exceed a thousand miles. Moreover there is nothing to show, and it is rather unlikely, that the centre with the lowest pressure at any level above the surface of the earth is situated vertically above the lowest pressure at the earth's surface or even in a straight line with the lowest pressure above and below its level, so that we are not entitled to speak of an axis in a typhoon.

The enormous energy exhibited by a typhoon must be traced to the radiation of the sun, which heats the central area and effects the evaporation of water, to which the great humidity is due. This energy is partly spent in overcoming friction between air and sea-surface and also between layers of air moving in different directions, but mainly in overcoming the former, and in raising quantities of air. The energy is partly recuperated by the heat generated through friction, by the condensation of aqueous vapour, and by the descent of air in the surrounding area. Whether part of the energy is drawn from the momentum of the earth is not known for certain.

The high pressures surrounding the cyclone in a typhoon are plainly traced on our weather-maps, which although imperfect with regard to isobars, generally show the barometer to be rising from about 600 to about 1000 miles in front and to the right and left side of the cyclone, which rise is as a rule accompanied by clear and dry but hot weather and light winds of variable direction. It is much more

difficult to trace the existence of a high pressure area (anti-cyclone) behind the cyclone, simply because the barometer is in any case rising there. But apart from the question of the high pressure, there may be supposed to follow the cyclone, there does not generally exist a fine weather area behind it. The S and particularly SW winds blow there very fresh, accompanied by overcast, damp and frequent wet weather. Thunderstorms likewise follow after a typhoon especially along the coast of southern China. This is easily explained in close analogy with land and sea breezes as for instance when a typhoon has raged in the Formosa Channel and is followed there by overcast, wet and in consequence cool weather, while the fine and hot weather area continues to prevail in Tonquin, Hainan and some part of the southern coast of China: the hot air will naturally expand and overflow the cooler air which will be drawn westward at the surface of the earth, thus generating a vortex motion round horizontal axis, the recognized adjunct of a thunderstorm. The Easterly squalls occasionally felt here when a typhoon is passing northwards through the Formosa Channel are thus explained.

From observations made here it appears that within 150 miles of the centre of a typhoon the sky is densely overcast with nim. clouds accompanied by heavy rain and within 300 miles on an average 90 per cent. of the sky is covered with cum., R-cum or nimbus clouds, above which the different upper clouds are visible. Within 60 miles of the centre the rain generally pours down in torrents. Northwest of the centre between 300 and 600 miles away the percentage is 50, the lower clouds being generally cum. above which c-cum. predominate, and between 600 and 900 miles away it is 40, the lower clouds being generally cum., above which c-cum. are usually seen. Southwest of the centre between 300 and 600 miles away the average percentage is 60, the lower clouds being cum. or nim. and the upper generally c-cum. or c-str., and between 600 and 900 miles away it is 50, the lower clouds being generally cum. cum-str. or nimbus (the latter predominate straight S of the centre) and the upper, c., c-cum. or c-str. Cirrus clouds are found within 1200 miles on all sides of the centre of a typhoon. Thunder and lightning are observed in the region covered by cum-str., but not elsewhere. In the small typhoons that pass South of Luzon lightning is seen nearer the centre.

The average temperature in Hongkong when a typhoon is more than 300 miles away is about 81° and it rises frequently much higher. Within 300 miles of the centre the temperature falls quickly owing to the great amount of heavy clouds. The difference between the temperature at the Peak and at the Observatory does not appear to be affected by the approach of a typhoon, but further observation is required to elucidate this point.—The dimensions here given must as far as the inner area is concerned be much reduced in case of a typhoon in a low latitude, while above 30° latitude the circumstances appear to be more irregular than farther south. Very near the centre the temperature at sea is generally about 76° and on shore about 78°.

Rain fallen during a typhoon is not accurately measured in a well exposed gauge as the strength of the wind to a great extent prevents its falling into the gauge. More rain falls in sheltered spots or where the force of the wind is broken by an obstacle.

The diameter of the bull's eye of a typhoon between 10° and 15° latitude is about 4 miles. In 25° latitude it appears to be occasionally as much as 30 miles in diameter, but bull's eyes of small diameter have been found in case of typhoons crossing Japan. This area is characterised by very light winds or perhaps occasionally by perfect calms. Generally the sea is mountainous but occasionally it calms down to some extent together with the wind. A downrush of air in the bull's eye of a typhoon is out of the question as the sky there is covered with light clouds, but on the other hand it is evident from the clearing of the sky that the uprush of air has ceased or almost ceased.

That the centre of the bull's eye does not coincide with the centre of all the directions of the wind when projected on a diagram may to some extent be caused by the ellipticity and eccentricity of the isobars.

The gradients corresponding to a certain force of wind is somewhat uncertain particularly when the force of the wind exceeds a whole gale, but it does not seem to be perceptibly affected by the latitude. It should be remembered that the average temperature in the typhoon season does not change much with the latitude in the area here under discussion: On an average a gradient of 0.02 inches in 15 miles corresponds to a force of wind=6 on Beauforts scale, 0.03 to 7, 0.04 to 8, 0.05 to 9, 0.07 to 10, 0.10 to 11 and where the gradient is above 0.10 it generally blows with full typhoon force. In low latitudes the gradient occasionally exceeds one inch in 15 miles.

The wind blows generally with the force of a strong breeze within 300 miles of the centre between 20° and 25° latitude, but in 12° latitude it appears that it does not attain this force till within about 100 miles of the centre. The force of the wind is however different in different azimuths. Near land it is frequently very irregularly distributed. The wind blows in gusts in a typhoon. More damage is however done to ships by the high cross seas always experienced near the centre. The swell is felt within from 300 to 500 miles of the centre but this depends of course upon the situation of the land.

The angle between the direction of the wind and the direction of the gradient is on an average 43° in front of the centre and 53° behind the centre between 10° and 25° latitude,—65° in front and 85° behind between 30° and 35° latitude,—and 49° in front and 62° behind between 10° and 35° latitude. The angle appears to be smaller near the shore than on the open sea for offshore winds. And far out at sea, the difference between the angle in front and behind the centre appears to be small.

As the angle between the direction of the wind and the gradient does not change much while the wind is strong on approaching to or on receding from the centre, it follows that the air moves towards the centre in logarithmic spirals or rather (as it is at the same times ascending) in screws whose horizontal projections are such spirals. This is quite correct in case of a stationary typhoon, but while typhoon changes its position, new portions of air are constantly set in motion while others are stopping behind, and an air particle describes therefore with variable speed a curve of double curvature, whose horizontal projection is a kind of curve of pursuit, its path being constantly directed towards a point about half a rightangle distant from the centre of the typhoon, which may for a short period be supposed to move on a parabola.

As the deflection of the wind towards the right increases with the sine of the latitude, the wind south of the centre must ceteris paribus blow more straight in towards the centre than north of it. The difference between the amount of inflow north and south of the centre is proportional to the cosine of the latitude of the centre, and is therefore largest in a low latitude, but it increases of course also together with the dimensions of the typhoon, and this is the reason, why by far the greater number of typhoons move in a northerly direction and with increasing velocity on account of their expansion.

The path actually followed by a typhoon appears to depend upon the wind, that prevails at the time. Typhoon XVIII of 1884 was blown SWestward by the NE monsoon, while in the summer of 1885 when the SW monsoon was strong, typhoons moved Northwards. Whence also typhoons depend upon the season of the year. This explanation likewise agrees with the fact that depressions in their motion onwards keep a permanent high pressure area on the right, with more or less steeper gradients and stronger wind on that side. Probably the wind is on the whole stronger behind than in front of the centre and it stretches farther away behind it. A typhoon moving SWestward is generally followed by strong NE wind that keeps blowing for some time, and when a typhoon has passed Northwards is followed by strong and more or less persistent SW winds. Typhoons are likewise deflected from their previous course when exposed to strong winds blowing out of open channels in which case the speed of the progress is frequently abruptly increased.

Very low clouds in a typhoon move with the wind. When clouds are observed at a higher level in the anterior semicircle their direction forms generally an angle with the gradient, that is about two points larger than the angle between the wind and the gradient. But at some distance behind the typhoon they are frequently observed to move almost straight towards the centre.

It is probable, that the smaller angle which the wind forms with the gradient in front of the centre, does not altogether depend upon the increased friction in case of offshore winds. The inertia of the air would account for it in case of a typhoon on the open sea. We have seen, that when the wind rises after a calm, such as precedes a typhoon, the air must in the first instance blow straight in towards the centre while the wind behind moving with less accelerated speed would have the opposite tendency there. It would at first sight appear, that the wind in front, blowing more straight towards the centre, must cause the centre to be filled up in front and pushed backwards, but this would be compensated by the greater altitude of the disturbance behind the centre. If the vertical height of the typhoon behind the centre is to the height in front in inverse proportion to the cosines of the corresponding angles, no effect on the progressive motion of the typhoon would follow. But it reaches probably much higher up behind, so that the centre is filled up quicker there than in front and the centre is in consequence pushed forwards.

When the centre has entered on dry land it frequently moves faster owing to the disturbance in that case being much greater behind i. e. over the open sea.—Owing to the rotation of the earth W winds have a tendency to raise the air especially in low latitudes, which would on the whole contribute to increase the disturbance behind the centre. The same tendency would cause the force of W and SW winds to be smaller than the force of E and NE winds for the same gradient.

That the principal part of the disturbance is situated high above the surface of the earth is proved by the fact, that the centres of typhoons pass across mountains several thousand feet high, and also by the circumstance that the difference between the temperature at this Observatory and the Peak is not perceptibly affected by the approach of a typhoon, for we cannot well presume, that the average temperature of a vertical column of air is lower near the centre than outside the cyclone. That on the other hand the cyclone does not attain the height of the cirrus clouds is made probable by the observation of their direction, although unfortunately it is impossible to see upper clouds near the centre and observations of the upper clouds in the eye of a typhoon are a desideratum. Over the beginning of the fine weather area the cirrus back towards NE and they then sensibly preserve this direction. But the amount of cirrus cloud preceding a typhoon show that frozen water vapour is carried miles up in the air through the action of a typhoon.

The average rate of progress of the centre of a typhoon in 11° latitude is 5 miles an hour. In 13° it is $6\frac{1}{2}$, in 15° it is 8, in 20° it is 9, in 25° it is 11, in 30° it is 14 and in $32\frac{1}{2}^{\circ}$ latitude it is 17 miles an hour. The rate of progress does not vary perceptibly in case of typhoons south of 13° latitude but is more variable the farther north we go. In $32\frac{1}{2}^{\circ}$ latitude it varies from 6 to 36 miles an hour.

The typhoons while E or SE of the Philippines are found to move towards a direction between W and NNW. Subsequently they recurve and pass away in a direction between NNE and ENE. They do not all recurve, but about two thirds of them are found to do so. They recurve between 20° and 40° latitude and between 115° and 130° longitude. The average place of recurvature lies in 26° N, 121° E about the position of the Middle Dog Light-house.

In *Observations and Researches made in 1884* (Appendix M.) I have suggested the division of typhoons into four classes according to the paths which they usually follow. No doubt abnormal instances occasionally present themselves (Comp. Typhoon VI of 1885), in China as well as in other countries but they are of rare occurrence.

The first class of typhoons occur at the beginning and end of the typhoon season. They cross the China Sea, and pass either in a WNW direction from the neighbourhood of Luzon towards Tonquin as Typhoon II of 1884, or, if pressure is high over Siam and Annam, they pass first Westward and subsequently SW, as Typhoon XVIII of 1884. They can generally be followed between 5 and 12 days.

The second class of typhoons is the most frequently encountered, and their paths can be traced farthest. They generally move NW and either (a) strike the coast of China south of the Formosa Channel before recurving as Typhoon IX of 1884, in which case they generally abruptly lose the character of tropical hurricanes, or (b) traverse the Formosa Channel as Typhoons I of 1884 and VI of 1885 or (c) they strike the Coast of China north of Formosa as Typhoons IV of 1884 and V of 1885. After recurving they generally cross Japan or the Sea of Japan. They occur from June to September inclusive but are most common in August and September. More than a third of the typhoons of 1884 and 1885 belonged to this class. They can be followed on an average 7 days, or rather between 5 and 12 days.

Typhoons of the third class are probably the most numerous of all, but they are not encountered quite so frequently as typhoons of the second class and therefore their existence is sometimes unsuspected, although they no doubt influence the weather along the Eastern Coast of China through the high pressure area. They pass E of Formosa moving Northwards. After recurving they skirt the Southern Coast of Japan or cross Japan or traverse the Sea of Japan or enter Southern Siberia. They prevail at the same season as the typhoons of the second class and they may be traced on an average during 7 days or more correctly between 3 and 12 days. A typhoon of the third class frequently follows after one of the second class. When the latter has recurved, the former proceeds Northward. This is explained by the circumstance, that the effective low pressure area in Asia, the preceding typhoon, is then in fact considerably E of its normal position. It is also well known, that depressions are attracted towards places, which have just been traversed by a depression.

Typhoons of the fourth class pass S of Luzon moving Westward or first in this direction and then SW. They occur at the beginning and end of the typhoon season namely in April and December, but they are very rare. I have not succeeded in following them for more than a day or two.

TYPHOONS OF 1884.

On the 25th June, 1884, the barometer rose along the Coast of China and in Formosa, and fell in Manila, where a fresh breeze blew from SW with misty weather. The temperature was high, the humidity moderate and the weather cloudy along the Coast. Typhoon I appears to have been about 17° N, 123° E at 10 a. on this day. Moderate SE winds and a heavy swell are reported from ships that were out in the China Sea at the time. At 4 p. the barometric pressure was 29.71 in Manila. It blew a moderate SSW gale and the weather was overcast and wet. At 10 a. on the 26th the typhoon may have been about 18° N, 120° E. The barometer had risen in Manila and had begun to fall along the SE Coast of China, but it remained steady in the North. Fine weather and light winds prevailed along the Coast. At 10 a. on the 27th the typhoon may have been in $19\frac{1}{2}$ N, 119° E, and the barometer was falling along the SE Coast, but had risen in Shanghai, where it however began to fall in the afternoon. At 10 a. on the 28th the typhoon may have been in about 21° N, 118° E. The centre appears to have recurred about a degree East of the Pratas Shoal. The barometer was still falling slowly along the SE Coast and in Formosa. The air was comparatively dry. Light winds prevailed. The layer of clouds stretched out at least 200 miles in front of the centre and it rained 100 miles in front. But in fact cloudy weather, with drizzling rain in places, prevailed along the E Coast and in Formosa, where the weather had been unsettled for the last few days with a heavy swell in the sea. In the evening it blew a fresh SE breeze at S. Cape. The weather was misty and the sky had threatening appearance.

In the early morning hours on the 29th it blew a whole gale in Takow, the wind shifting to N and back again very rapidly to SE probably owing to eddies round the hills. The squalls were heavy. In the Pescadores it blew a breeze from ESE and the wind backed and increased in force till 4 p. when it blew with typhoon force accompanied by heavy rain. At S. Cape it blew a fresh SW gale on the same afternoon. At 10 a. on the 29th the centre appears to have been in $22^{\circ} 45'$ N, $119^{\circ} 30'$ E and its progressive velocity was then suddenly increased, thus furnishing another instance of the frequently observed, of a depression passing through or crossing the Formosa Channel at a great increased rate of progress. The energy of this typhoon appears however to have been to a great extent expended before it re-entered the Pacific. It was not felt in Foochow. At 10 a. on the 30th the centre may have been about 27° N, 123° E. Strong SSW breezes or a moderate gale are reported from the Northern entrance to the Formosa Channel and from Northern Formosa.

The other typhoons in 1884 have been reported on in the Monthly Weather Reports for that year, but the publication of the paths was unavoidably delayed. They are represented on the first four of the accompanying plates.

TYPHOONS OF 1885.

In the middle of April gradients were on the whole slight. They had indicated NE and were beginning to indicate SW winds. On the 21st the barometer rose along the Coast, the temperature and humidity decreased and gradients again indicated moderate NE winds. The barometer reached its maximum at 11 a. on the 24th in Hongkong, the temperature increasing and the sky clearing on the day. Fine weather and light winds prevailed along the Coast of China. At that time the centre of Typhoon I was approaching Cebu from the East. The barometer reached its maximum 29.91 in Bolinao at 10 a. on the same day, falling to 29.76 at 4 p. on the 26th. At the latter epoch overcast and hazy weather set in over Luzon and the temperature and humidity increased along the Coast.

On the 24th it was noticed in Iloilo ($10^{\circ} 50' N$, $122^{\circ} 40' E$) that the barometer began to fall. The temperature was excessively high and a fresh N wind blew during the day, the clouds coming from NNE. Towards afternoon the sky became overcast and it began to rain. At daylight next morning the temperature had fallen to 80° . It still rained in squalls. The wind blew fresh from N and the clouds, which were ragged and torn came faster from the same quarter. About 11 a. on the 25th the wind had backed to NW and the clouds to NNW, the squalls were more frequent, the clouds lower and the appearance of the weather very wild. In the afternoon the wind continued increasing in force with constant rain and very hard squalls. The clouds were very low and flying fast from NW. At 8 p. frequent flashes of lightning were observed to westward, the wind frequently changed few points and some buildings were falling about 9 p. At 10 p. the barometer stood at 29.26 and began to rise shortly after. The wind blew very hard from N. About the same hour loud noise was heard from the volcano, which had lately emitted much smoke. At 11 p. the wind moderated and blew from different directions. Lightning had been seen in every direction but was now only noticed towards about SSE. The rain ceased and the clouds rose higher up. At midnight the wind rose suddenly from SE with very violent squalls and constant heavy rain. At 1 a. on the 26th, the typhoon was at its height, wind and cloud coming from SE at a furious rate, and more houses were falling. At 4 a. the wind began to moderate, the barometer had reached 29.45, the temperature was 74° , the clouds had risen higher and backed to ESE, and the squalls were losing force. At 7 a. there were some hard squalls and heavy rain. At 8 a. the wind had backed to ESE and the clouds to SE, and the barometer had risen to 29.56. The weather then brightened fast. At noon the wind blew moderate from E with the barometer at 29.67 and the thermometer at 84° .

Assuming the progressive speed of the centre to have been about 6 miles an hour, it appears to have been in about $11^{\circ} N$, $124^{\circ} E$ at 10 a. on the 25th and in about $10\frac{1}{2}^{\circ} N$, $121\frac{1}{2}^{\circ} E$ at 10 a. on the 26th. The incurving of the wind amounted to nearly 45° . The clouds indicate less incurving of the wind at a higher altitude. There appears to have been a fresh N breeze and clouds with light rain to have come up at a distance of 150 miles in front of the centre. Storm-force was reached about 35 miles from the centre and typhoon force 15 miles therefrom, the steepest gradient being apparently 0.20 inches in 15 miles. The diameter of the central calm may not have much exceeded 6 miles, and it is possible though not proved that it followed behind the lowest barometer. The small diameter and the accompanying electric phenomena are characteristic of a typhoon of the fourth class (Comp. Obs. and Res. 1884, Appendix M). The existence of this typhoon was not known to me at the time, but in any case warnings would have been out of place.

During the latter part of June, the barometer was falling along the Coast. The temperature and humidity were high and gradients for SW winds moderate. On the 27th June, it became cloudy and rainy in Luzon with fresh SW breezes. The barometer fell a few hundredths of an inch on the 29th and stood at 29.84 at 10 a. on the 30th. The temperature 76° was remarkably low and the weather was squally. At 9 a. on the same day the barometer stood at 29.62 at S. Cape (Formosa) and began to rise. Moderate NW breezes on the previous day changed to light WSW breezes on the 30th and the sky became densely overcast. At 3 p. on the same day the barometer had fallen to 29.61 at Steep Island (between Ningpo and Shanghai) with a moderate NW breeze, and fog with drizzling rain set in. It became subsequently known, that Typhoon II had passed northwards. At 10 a. on the 29th its centre may have been about $18^{\circ} N$, $131^{\circ} E$, but it is by no means certain that the typhoon was fully developed at that time. At 10 a. on the 30th it was about $24^{\circ} N$, $128^{\circ} E$ and appears to have moved northwards with an extraordinary velocity. At 10 a. on the 1st July, it was in $30^{\circ} 50' N$, $133^{\circ} 9' E$ and at 10 a. on the 2nd in $38^{\circ} 40' N$, $139^{\circ} 55' E$. The depression appears to have then disappeared towards NNE but its energy was evidently expended.

The Messageries Maritimes Steamer *Tunais* left Yokohama on the 28th June and had dull and rainy weather and variable winds until the 30th. The steamer was then about 40 miles off Cape Tai (31° 55' N, 133° 15' E), when the sky became lead coloured and of so bad an appearance, that precautions were taken to ensure the safety of the vessel. The wind at this time was E by N with a heavy sea running, while the air was very misty and at 12.20 p. the rain began to pour down in torrents. At 1 p. the typhoon suddenly rose in all its fury the wind blowing from NW but immediately veering to N and continuing to blow from NNE during the remainder of the day. At Noon the height of the barometer was 29.92. It fell to 29.72 at midnight.—In the early morning hours on the 1st July the wind continued to blow with typhoon force from between E and NE. The barometer fell to

28.94 at 10 a. and reached its lowest reading 28.82 about 11.30 a. From 9.30 to 10.15 a. there was heavy rain and the wind but not the sea moderated, but it blew again with typhoon force from 10 to 11.45 a. with seas from various directions. At Noon the vessel was in $31^{\circ} 13' N$, $131^{\circ} 13' E$. In the course of the afternoon the wind backed from NW at 1 p. to W in the evening and the weather moderated. There was rain with the breeze in the afternoon but in the evening the horizon was rather clear.

The typhoon was very heavy in Japan. The barometer fell to 28.86 near the centre. The isobars were rather elongated in about the line of the track. In front of the centre the wind appears to have incurved somewhat less than usually occurs in a typhoon in the China Sea, but behind the centre the wind blew much more straight towards it. The steepest gradients appear to have been 12 millimeters in 1° or more.

The following day, the barometer continued to rise along the Southern Coast of China. Gradients for SW winds were steep but decreased on the 5th. On the 3rd and the 4th the SW monsoon reached the force of a moderate gale in the Formosa Channel. In Takow it rose even to a fresh SW gale. Gradients for SW winds continued steep till the 10th. The temperature and humidity were high and the weather overcast. At 1 p. on the 11th July I wrote in the *China Coast Meteorological Register*: "It is possible, that there is a typhoon in the Pacific, but it is not indicated with certainty. If so fine weather and light winds may be expected along the Coast of China." It now appears, that Typhoon III was at the time 1500 miles SE of Hongkong, and the weather cleared and the wind decreased on the following days. In Iloilo fine weather with moderate SW monsoon had prevailed in the beginning of July. On the 8th and the 9th the barometer rose a few hundredths of an inch and began to fall distinctly on the latter day the evening of which was squally and wet. The weather became cloudy and a gentle N breeze was registered on the 13th. The barometer reached its minimum on the 14th having then fallen a tenth of an inch since the 9th.

On the 11th of July the barometer was rising except in Southern Luzon. Light SE breezes, blew along the Southern Coast of China and in the Formosa Straits. Gradients (for SE winds) amounted to about 0.1 ins. in 11° . Light NE breezes prevailed North of Formosa. The weather was cloudy. It may be surmised, that the centre of typhoon was in $8^{\circ} N$, $134^{\circ} E$ at 10 a.

On the 12th the barometer behaved as on the previous day. Gradients (for NE winds) had not changed in amount. Light NE breezes prevailed in Southern China and over the China Sea. It was raining in Hainan and Tonquin. At 10 a. the typhoon was about $9^{\circ} N$, $133^{\circ} E$.

On the 13th the barometer began to fall in Formosa and along the SE Coast of China. Gradients had not changed perceptibly. Gentle NE breezes blew over the China Sea, Southern China and Formosa, and a light N breeze was reported at 4 p. from Bolinao. Detached clouds prevailed in China, Formosa and Luzon. It was still raining in Hainan and in Tonquin. At 10 a. the typhoon was about $10^{\circ} N$, $131^{\circ} E$. The Captain of the steam-ship *Airlie* at 6 p. in $20^{\circ} N$, $128^{\circ} E$ noticed a peculiar colour in the clouds at sunset. The wind blew fresh from E, but the weather was fine.

On the 14th the barometer was falling with detached clouds and light breezes from various directions at all stations in the Far East, from which returns are received. Gradients (for N winds) had not changed in amount. A light NE breeze blew at S. Cape and a N breeze at Bolinao. At 10 a. the typhoon was about $12^{\circ} N$, $130^{\circ} E$. The Captain of the steam-ship *Airlie* at 4 p. in $17\frac{1}{2}^{\circ} N$, $130^{\circ} E$ suspected bad weather to the SW. The weather too was squally with heavy rain. It blew a moderate gale from E by S.

On the 15th the barometer continued to fall, the sky had cleared particularly in the SE and light breezes blew from various directions. Over the China Sea gradients (for N winds) amounted now to about 0.1 in 5 degrees. A light NE breeze continued to blow at S. Cape and a light air from NW at Bolinao. At 10 a. the typhoon was about $15^{\circ} N$, $128^{\circ} E$. The steam-ship *Airlie* which at noon was in $15^{\circ} 31' N$, $132^{\circ} 7' E$ had rather fine weather but a lumpy sea from S and strong SSE breeze in the morning. It fell and veered to S in the afternoon with SW swell.

On the 16th the fall in the barometer was increased, the weather continued fine with light breezes from various directions. Gradients had not changed perceptibly. A gentle NW breeze was registered at S. Cape, a light air from W backing to SW at Bolinao. From Manila the lowest reading of the barometer 29.75 was reported at 4 p. The lowest reported from Bolinao on this and the following day was 29.71. At 10 a. the typhoon was about $18^{\circ} N$, $126^{\circ} E$. The steam-ship *Airlie* in $13^{\circ} N$, $135^{\circ} E$ had wind from WNW and swell from W with fine weather and the barque *Nicoya* in $14^{\circ} N$, $118^{\circ} E$ had ESE wind.

At 10 a. on the 17th the centre appears to have been in about $21^{\circ} 23' N$, $124^{\circ} 18' E$. The barometer in Formosa had fallen about 0.2 ins. during the last 24 hours. Along the Southern Coast of China it had fallen 0.1, and 0.05 along the Yangtzejiang, but it had risen a few hundredths in Northern China. The temperature was high, the humidity comparatively low and the weather fine along the Coast. A fresh WNW breeze blew at S. Cape, where the weather was overcast and gloomy. A gen-

A breeze was felt in Northern Formosa which increased to a fresh breeze in the afternoon. The appearance of the weather was threatening. Gradients appear to have amounted to about 0.04 ins. in degree over Formosa and 0.02 between Hongkong and Formosa.

At 10 a. on the 18th the centre appears to have been in about $24^{\circ} 13' N$, $122^{\circ} 53' E$. The depression was perhaps at this time most completely developed. The barometer at S. Cape had fallen to 29.50. It blew a moderate gale from WSW. At Tamsui the wind backed to NW and had increased to a strong gale in the early morning hours and blew a fresh gale at 10 a. Between Noon and 1.30 p. there was quite a lull in the wind. Then it freshened again and backed to SW, from which quarter blew a heavy gale with much rain (12.44 ins. on the 18th). The lowest reading of the barometer on board the steam-ship *Hailoong* 29.44 occurred at 1 p. At Middle Dog Lighthouse it blew a fresh breeze in the early morning hours. It backed to WNW the following night.

About 10 a. on the 19th the centre appears to have been in $29^{\circ} N$, $120^{\circ} E$ and to have entered the mainland about this time. It appears that the depression immediately began to fill up and the barometer was rising. At Ningpo it blew a light S, at Wuhu a light E and at Chinkiang a light SE breeze, and at N. Saddle a moderate SE veering to S breeze. In the Formosa Channel fresh SW breezes and cloudy weather with rain prevailed.

This typhoon does not appear to have developed much energy and its track is, for want of observations at sea, rather uncertain, but it was followed by a much greater disturbance, which has been well observed: Typhoon IV made its appearance ESE of Luzon as early as the 16th July, at 11 p. on which day the steam-ship *Airlie* had a falling barometer (about 30.0 ins.) and NW wind with W swell and rain in $12^{\circ} N$, $135^{\circ} E$. At 1.30 the following morning the wind suddenly shifted to NE and blew with stormforce, which was altogether unexpected as the day had been fine and calm. The greatest change in the barometer occurred between 3 a. and 5 a. when the mercury fell at least one inch in 2 hours.

The lowest reading of the barometer 28.20 was recorded at 6.30 a. this was followed by a lull of nearly half an hour's duration, from which we may conclude that the diameter of the central calm, which appears to have followed somewhat behind the lowest pressure, was about 2 miles in diameter at this early stage. Unfortunately it has not been ascertained whether the sky cleared during the lull. Then the wind suddenly shifted to SE and blew again with full typhoon force. At 9 a. it moderated and veered through S to SW and the barometer rose rapidly. Strong wind appears to have been confined to an area within about 60 miles of the centre.

At 10 a. on the 16th the centre of Typhoon IV was about $11^{\circ} 45' N$, $137^{\circ} 17' E$, on the 17th about $11^{\circ} 57' N$, $135^{\circ} 35' E$, on the 18th about $12^{\circ} 18' N$, $133^{\circ} 50' E$, on the 19th about $12^{\circ} 58' N$, $131^{\circ} 48' E$, and at 10 a. on the 20th about $14^{\circ} 5' N$, $129^{\circ} 38' E$.

The highest reading of the barometer (29.89) in Manila subsequent to the preceding typhoon was reported at 4 p. on the 18th. There was then a light air from NNW. On the 20th the barometer had fallen 0.05 ins. over Luzon and risen about 0.1 in Formosa. Gradients for SW winds were moderate, the barometer in Manila standing at 29.83 and in Hongkong at 29.73 at 10 a. It appears therefore that the typhoon was at this time working its way towards NW in the trough between high pressures on both sides, being likewise preceded by an area with rising barometer. Gentle variable or SW breezes prevailed in Southern China and Formosa where the weather was partly cloudy with light rain. The temperature was high but the humidity comparatively low. It was misty in Luzon.

At 10 a. on the 21st the centre appears to have been in $15^{\circ} 30' N$, $127^{\circ} 25' E$. The barometer had risen a few hundredths of an inch in China and in Northern Formosa, but had fallen 0.06 at S. Cape and more than this in Luzon. Gradients for NE winds were slight, the barometer standing at 29.72 in Manila and 29.77 in Hongkong and at S. Cape. Gentle NE breezes and partly clouded weather prevailed. Over Luzon the sky was clear and a light air from WSW was reported from Manila. A gentle SW breeze and wet weather were recorded in Iloilo.

At 10 a. on the 22nd the centre appears to have been in $18^{\circ} 0' N$, $125^{\circ} 22' E$. The barometer in Manila had fallen to 29.67, the weather was overcast and rainy and a fresh WSW gale was reported from there. A gentle NNE backing to N breeze blew at S. Cape, where the barometer had fallen about 0.2 inches, but the weather continued fine. In Northern Formosa strong ESE and SE breezes were felt, the weather was squally and the sea high. Along the SE Coast of China the barometer had fallen about 0.05 inches, the temperature remained high and the humidity comparatively low. The weather was fine and the winds light. At stations along the Yangtzekiang the barometer had risen, the weather was fine and gentle NE breezes prevailed. Between Shanghai and Nagasaki moderate S breezes and fine weather were registered.

At 10 a. on the 23rd the centre appears to have been in $22^{\circ} 0' N$, $124^{\circ} 0' E$. SW breezes and wet weather prevailed over the Philippine Archipelago. At S. Cape it blew a light air from NW, the barometer (29.51) had fallen about 0.1 inches, and about the same quantity in Northern Formosa, where moderate NE breezes and overcast weather were registered. Fine weather with a slightly falling barometer and light NE breezes prevailed along the SE Coast of China, while the barometer was rising

slowly along the Yangtzejiang. Gentle E or SE breezes and overcast weather with passing showers were registered between Shanghai and Nagasaki. During the previous night the steam-ship *Menmuir* in about 24° N, 123° E encountered a rapidly increasing E gale, which backed to NE at 3 a. and a rapidly falling barometer (29.70 at 2 a.) The weather was overcast and threatening and the sea increasing. At 2 p. in $22^{\circ} 44'$ N, $123^{\circ} 40'$ E the barometer had fallen to 29.15, the wind blew with typhoon force from N and the sea was tremendous. At 8 p. it blew a strong gale from W by S and the barometer had risen to 29.18. At one o'clock next morning it blew a fresh SW gale and the sea was still heavy. At noon on the 24th in $21^{\circ} 10'$ N, $126^{\circ} 33'$ E it blew a fresh SW breeze. It is evident that the disturbance had in the course of the week expanded and it is highly probable that the central depression was much less steep.

During the early morning hours on the 24th the steam-ship *Cicero* in 30° N, $126^{\circ} 1'$ E experienced strong, increasing E wind and heavy squalls, which increased to a furious gale and high sea at 6 a. At 10 a. the centre appears to have been in $27^{\circ} 5'$ N, $124^{\circ} 8'$ E. The barometer had risen about 0.10 inches in Luzon. It read 29.84 in Manila and 29.72 in Hongkong. Light W breezes prevailed with rain in Luzon. The temperature continued high and the humidity moderate along the S Coast of China. It blew moderate NW gales and the weather was cloudy and squally in Formosa. In the Channel moderate NW breezes prevailed and the weather was fine. In Ningpo it blew a gentle NE backing to NW breeze with wet weather. Along the Yangtzejiang the barometer had fallen a few hundredths of an inch and moderate NE breezes and fine weather prevailed. At Port Hamilton there blew a gentle ENE breeze and the weather was cloudy and misty. The barometer, which had been rising up to 7 a. was just beginning to fall slowly. At 3 p. it blew a strong NW gale at S. Cape. This would seem to have been due to the high mountain range of Formosa confining the air, that had entered the Channel through the Northern entrance, which on finding an exit at the Southern extremity of the island, blew there with, under the circumstances, unusual force, seeing that the centre of the typhoon was long past. This feature is perhaps of some importance to the climate of this region, the air pent up in the channel increasing the frequency and force of E winds in Hongkong and W winds south of Formosa.

The steam-ship *Cicero* at 2 p. on the 24th in about 29° N, 125° E, finding it impossible to run any longer, hove to. The storm was then blowing from ENE and increasing in force till it blew a most terrific gale at 5 p. At this time the effect of oil on the water was tried and found to be of great service in calming the sea alongside the vessel. At midnight it blew a typhoon, and the barometer fell to 28.49 (reduced) at 1 a. on the 25th. Half an hour after a rise was noticed. The greatest force of wind occurred at 6.30 a. when it blew with full typhoon force from W. At 8 a. the wind showed signs of moderating, but the sea ran with great force, subsequently the wind backed to SW.

The British brig *Bessie* bound from Newchwang to Hongkong, encountered a furious ENE squall at noon on the 24th in $29^{\circ} 9'$ N, $123^{\circ} 49'$ E. At 4 p. the storm blew with great force from NE with terrific squalls and mountainous sea. At 10 p. the heaviest part of the typhoon, from N, occurred. It lasted 2 hours. The barometer fell to 29.20. Then the wind began to back. At noon on the 25th in $28^{\circ} 21'$ N, $123^{\circ} 57'$ E it still blew a strong breeze from WNW.

In the morning on the 24th a moderate ENE breeze, a slowly falling barometer and misty partly overcast weather were registered at N Saddle Lighthouse. In the afternoon squally weather set in and the wind backed and increased in force. It blew a fresh NE gale at 9 p. and with the same force from NNW at 3 a. on the 25th. At this hour the barometer reached its lowest reading 29.48 (corrected and reduced to sea level). In the afternoon the wind backed to NW and calmed down in the evening.

The P. & O. steam-ship *Kashgar* at noon on the 24th in $30^{\circ} 25'$ N, $126^{\circ} 38'$ E had a moderate breeze from E. The barometer was falling and the weather thick and rainy. In the afternoon the sea rose high, the sky was overcast and heavy rain fell and the wind backed towards SE and blew a fresh gale in the afternoon. At 1 a. it had reached SSE and increased to storm force and at 4 a. it blew with strong typhoon force from S. The barometer reached its lowest reading 28.50 between 6 a. and 8 a. The sea was mountainous and the rain poured down in torrents in heavy squalls. Thereafter the wind veered to SW and at noon on the 25th it still blew a whole gale from SW by W, and the weather was but slowly moderating, the barometer remaining still at 28.89. At 4 p. it blew a fresh gale from W with a high confused sea. Then the wind began to back towards SW.

At 10 a. on the 25th the centre appears to have been in $31^{\circ} 30'$ N, $125^{\circ} 58'$ E. From Luzon light S breezes were reported. The barometer (29.90) continued to rise. The sky was clearing and the weather was improved. In Formosa and in Southern China light SW breezes prevailed. The barometer was rising (29.77 in Hongkong), the temperature had fallen and the humidity had increased. The sky was cloudy and thunderstorms occurred along the Coast, as often happens after a typhoon has passed northwards. The weather was fine with light variable winds along the Yangtzejiang, where the barometer was falling slightly. At Shanghai it blew a moderate NNW breeze. At Ningpo and at the lighthouses between that port and Shanghai it blew more or less fresh breezes from NW. Round the Gulf of Petchili the barometer had fallen a tenth of an inch. The breezes were variable and the weather fine. But at NE Shantung Promontory it blew a fresh NE breeze and the weather was partly clouded. In Wladivostock the barometer had risen to about 30.02 and the air was calm. In Northern Korea the weather was overcast and wet with a slowly falling barometer and a gentle N

freeze. In Fusan (SE Corea) gloomy and rainy weather had set in on the previous night. The NE wind rose to a strong breeze at midnight and increased to a whole gale at 10 a. with thick rain and heavy gusts. At Port Hamilton the wind had also risen about midnight and shifted from SE to NE and it blew a whole gale from E in gusts at 10 a. In Kiusiu (Japan) it blew a strong ESE breeze. The barometer was falling and the weather cloudy and wet. The weather was squally and wet with heavy swell for SE.

H. M. S. *Daring* steaming from Nagasaki towards Port Hamilton encountered in the early morning on the 25th a fresh NE gale and a heavy sea from NEastward with squally and wet weather, which lasted the whole day. A cross sea got up at 6 a. The gale veered and increased in force and blew a strong E gale at 10 a. The barometer had fallen from 29.58 at 2 a. to 29.24 at 10 a. About noon the sea was heavy and confused and became mountainous at 3 p. About 7 p. the lowest reading of the barometer 28.55 was registered. Immediately before this, it had blown with stormforce from SE S. Then a lull was experienced and afterwards it blew a fresh gale from WSW. During the evening the sea calmed down too, which is unusual, and the sky cleared. The barometer rose steadily and was registered as 29.55 at 8 a. on the 26th.

The barometer fell on H. M. S. *Cleopatra*, then at anchor in Port Hamilton till 6 p. when it was registered at 28.62. At that hour it blew a whole gale from ESE. At 8 p. the barometer had risen to 28.79 and it blew a fresh gale from NNW. The wind veered and decreased in force during the evening and blew a gentle W breeze at midnight.

It appears that the centre of the typhoon after passing nearly over H. M. S. *Daring* altered its course, which up to that epoch had been about NNE, to NE and passed NW of Fusan about midnight on the 25th, at which time the height of the barometer was registered as 29.18. The wind which in the afternoon had blown a whole gale from NE with thick rain veered to SW after midnight and then calmed down by degrees. The area with strong wind was much greater in Southern Korea than in the latitude of the Philippines extending some 250 miles away from the centre, but the violence of the wind was also smaller and did not exceed storm force at any station.

The typhoon appears then to have turned NNWestward the centre skirting the Coast but probably never leaving the land. At 10 a. on the 26th the centre may have been about $38^{\circ} 22' N$, $128^{\circ} 2' E$. It blew now in Yuensan with storm-force from about NE. The wind had risen rather suddenly before 9 p. the previous evening to a fresh NE gale with wet weather. After midnight the sea broke and overflowed the settlement. The lowest reading of the barometer 29.44 (uncorrected) was registered at noon on the 26th, the wind blowing then a NNE storm and the sea was very high. At 5 p. it suddenly fell calm and at 5 p. a light breeze rose from SSW, but the calm continued afterwards with a rising barometer but wet weather. It is evident that the SW gale was kept back by the high mountains in Korea, while the NE winds blew with unimpeded strength as long as their course lay over the open sea. The typhoon passed northwards after passing close to the E of Yuensan and the centre being then surrounded by rugged land the disturbance soon lost its force.

At 10 a. on the 26th light SW breezes prevailed in Southern China, Formosa and the Philippines. The weather was fine in some and overcast and wet in other places. The temperature was high, the humidity rather moderate and the barometer rising. Also in the North of China the weather was fine and the winds light except at Shantung promontory where it blew a fresh NE breeze. South of Korea blew a fresh SW breeze accompanied with occasional squalls.

About 7 a. on the 27th it blew a fresh SE breeze at Wladivostock. The weather was overcast and wet and the barometer had fallen to 29.55. The typhoon appears to have been in the latitude of Wladivostock the same morning passing about 4° westward of it. Light SW breezes prevailed in China and the temperature and humidity were high.

At 10 a. on the 28th the highest reading of the barometer 29.94 was reported from Manila. The barometer was rising generally and gradients rather great for SW winds. The barometer was high in Southern Japan. At 10 a. on the 29th the barometer had fallen 0.05 inch in Manila but had risen 0.02 along the Yangtzejiang. The temperature was not unusually high but the humidity was very great.

Already on the 27th Typhoon V made itself felt in the Pacific, and at 10 a. on that day its centre appears to have been in $21^{\circ} N$, $139^{\circ} E$. The Barque *Nicoya* in $20^{\circ} N$, $136^{\circ} E$ on the 27th experienced falling barometer, W wind with severe squalls, a rising sea and heavy rain. The following day the gale backed through S to SE. The sea was high and there occurred hard squalls with heavy rain. At 10 a. on the 28th the centre appears to have been in $21^{\circ} N$, $137^{\circ} E$ on the 29th in $22^{\circ} N$, $133^{\circ} E$ and on the 30th in $22^{\circ} N$, $130^{\circ} E$. It therefore moved westward in the trough between the high pressures in the North and in the South, and was preceded by an area with fine weather and a slight rise in the barometer.

At 10 a. on the 30th the barometer was still rising and the weather was fine in Shanghai but it had fallen some hundredths of an inch and it rained occasionally in the South. The winds were very light except in the Gulf of Petchili, in which a storm travelling from NW towards E was felt. Between Shanghai and Nagasaki moderate E or SE breezes were experienced.

At 10 a. on the 31st the centre appears to have been in $24^{\circ} N$, $127^{\circ} E$. The barometer had fallen nearly 0.2 inch at Steep Island but was steady along the Yangtzejiang with a slight rise in Hankow.

It had fallen a few hundredths of an inch in Northern Formosa and in Tonquin but risen as much in Luzon. Gradients over the China Sea were rather steep for SW winds and it was raining along the SE Coast of China, which is frequently the case when a typhoon approaches Northern Formosa from the East. It blew a gentle NE breeze at Steep Island and a fresh WSW breeze at Tamsui.

The British Barque *Wallace* in about 25° N, 125° E encountered a heavy ENE gale in the afternoon on the 31st. The barometer had been falling gradually for the previous twenty-four hours, but about noon it was seen to fall rapidly with every appearance of a heavy storm. At 6 p. the wind was blowing with a force impossible to describe. The sea was lifted up and driven in one continuous foam over the ship. At 9 p. the barometer had fallen to 28.50 (uncorrected) or about an inch since 1 p. At 4 a. on the 1st August the wind began to veer through E and reached S at 8 a. The barometer having then risen to 28.86. At noon on the 1st the typhoon was still blowing with unabated fury. The barometer stood about 29.10. It continued blowing a heavy gale till the 3rd. The Barque lost its masts and sustained other damage and it is fortunate that it was not lost, no one being left to tell the tale.

At 10 a. on the 1st August the centre was about 26° N, 124° E. The barometer was falling in Luzon and along the Coast of China but had risen slightly in Kiukiang and stations West thereof and also in Pakhoi and Haiphong. In Manila the height of the column was 29.83, in Haiphong 29.67 and moderate SW winds with rain prevailed along the Southern Coast of China, while the sky was clear over Luzon. The temperature was moderate and the humidity great. The weather was fine along the Yangtszekiang. Moderate SE breezes were registered in the Yellow Sea. A moderate SW gale was blowing in Northern Formosa. Moderate ENE breezes blew and the air was misty between Shanghai and Haiphong. A swell from about SE, and c-str: from N were observed on board H. M. S. *Rambler*.

At 10 a. on the 2nd the centre must have been about $27^{\circ} 10'$ N, $122^{\circ} 45'$ E having apparently changed its position very slowly during the previous 24 hours. The barometer had risen E and NE of the centre but fallen in China, Tonquin and Luzon. In Southern China and the Philippines the weather was much the same as on the previous day. Fresh SW breezes blew in the Formosa Channel and a moderate SW gale at its Northern entrance. A moderate N gale blew at Wenchow and moderate NE gales between Shanghai and Ningpo. Moderate SE breezes were felt in the Yellow Sea.

The centre appears by this time to have taken a NNW course, evidently influenced by the trend of the Coast, and at 10 p. on the 2nd it appears to have been in $28^{\circ} 52'$ N, $122^{\circ} 12'$ E. Ships near Taichow ($28\frac{1}{2}$ N, $121\frac{1}{2}$ E) report having experienced fresh NW gales that increased to very strong W gales at 10 p. At Steep Island it blew a typhoon from ENE at midnight and the weather was misty with drizzling rain. H. M. S. *Rambler* anchored W of Napier Island, ($30^{\circ} 40'$ N, $122^{\circ} 24'$ E) experienced a strong ENE gale with squalls and drizzling rain. In Shanghai it blew a fresh ENE gale. The weather was overcast and gloomy. At Ningpo it blew a fresh N gale.

The centre now turned towards NW and crossed Ningpo about 2 a. on the 3rd. About 6 a. it was SW of Shanghai. The barometer fell to 29.16 at Zikawei and it blew a strong NE gale, but neither on shore nor at sea was the rain anything like typhoon-rain in a lower latitude.

At 10 a. on the 3rd the centre appears to have been in $31^{\circ} 0'$ N, $120^{\circ} 18'$ E. The barometer had fallen everywhere in China except round the Gulf of Petchili. The temperature and humidity were high. Light SW winds prevailed in the China Sea, strong SSW breezes in the Formosa Channel and strong SE breezes between Ningpo and Shanghai. A fresh SE gale was registered at Zikawei, a moderate NE gale at Chinkiang and a gentle N breeze at Wuhu. At 10 p. the centre must have been situated between Chinkiang and Wuhu. It blew a fresh N breeze and it rained in Wuhu and a moderate ENE gale with drizzling rain in Chinkiang. At 3 a. on the 4th it blew a strong SW breeze in Wuhu and a fresh SE breeze in Chinkiang. The centre was moving NW westward but the violence of the wind had decreased and the depression was evidently filling up.

At 10 a. on the 4th the centre was about 33° N, 117° E. The barometer had risen at nearly all the stations. SW breezes with overcast and wet weather prevailed except in Luzon, where the weather was fine. A gentle SE breeze was registered at Chinkiang, a moderate SW breeze at Wuhu, a light W breeze at Kiukiang, fresh S breezes between Shanghai and Ningpo and moderate SE breezes in the Yellow Sea. Gentle SE breezes blew at Shantung Promontory and a gentle NE breeze at Taku, which latter place the barometer appears to have been rising. Although this typhoon did a great deal of damage at sea it does not appear to have been so severe as typhoons in a lower latitude generally are. Gales appear to have blown within 240 miles of the centre while at sea, but in Ningpo only within 150 miles of the centre. The sky was overcast within 240 miles of the centre. It was followed by thunderstorms south of its track with heavy rainfall (10.03 inches were measured at Amoy on the 4th).

On the 5th a rather shallow depression travelling northwards struck the Coast of Southern Nippon (Japan).

On the 6th and the 7th light SW breezes and fine weather prevailed in Southern China. On the 8th light NE breezes and fine weather prevailed but fresh W and SW winds blew in the Southern part of the China Sea E of the Gulf of Siam. It is almost certain that there was a typhoon in the Pacific on those days but no reports have been received. On the 9th it blew a fresh W gale with over-

and wet weather E of the Gulf of Siam, NE breezes and fine weather prevailed in Southern China and Formosa and moderate SE breezes North of Ningpo. On the 11th it blew a moderate ENE gale and the weather was wet between Ningpo and Chinkiang. The barometer was falling a little in Southern China and rising along the Yangtze River. On the 12th the barometer was rising in Luzon and along the whole extent of the China Coast. On the 13th gentle NE breezes prevailed in Southern China with cloudy weather, but early in the morning it blew a fresh gale in Hongkong in rain squalls of short duration. Light SW breezes blew over Luzon and WSW breezes in the China Sea between Luzon and South China. SE breezes prevailed in Northern China. The winds were rather fresher on the 14th.

At 10 a. on the 15th gentle SE breezes blew over Luzon, where the weather was cloudy. The barometer had risen in Iloilo where the breeze was SWesterly. SW winds blew in the China Sea between Iloilo and Saigon and variable W or SW winds accompanied by heavy rainshowers up to 15° latitude, while at 18° latitude the wind was Westerly. It appears that Typhoon VI was forming about 16° N, 115° E. For several days the wind had been circulating along the coasts and islands surrounding the China Sea, at the same time blowing towards a slight barometric minimum that must have been situated between the Philippines and the Gulf of Siam.

At 10 a. on the 16th the centre appears to have been in 18° 11' N, 115° 18' E. The S.S. *Marcia* in 17° N, 113° E encountered squally weather, strong N sea and variable W wind, the S.S. *Camorta* in 18° N, 114° E a fresh NNE gale and confused sea. The barometer on the latter ship (29.66) had not fallen much, the temperature was 78°, it was overcast and heavy rain was falling. The S.S. *Orestes* in 19° N, 114° E had a strong NE breeze, a confused sea and heavy rain. A light breeze with drizzling rain was reported from stations in Luzon, where the barometer had risen (29.90 at 10 a. in Manila). In the Formosa Channel and along the South Coast of China it blew moderate fresh NE breezes and the barometer had fallen slightly. It had risen in Ningpo and light S breezes prevailed North of that station. At S. Cape (Formosa) there blew a light ENE breeze. In the Pacific of Luzon far from the Coast, where for several days the breeze had been S it now began to blow from and after few days the next typhoon appeared in about 11° N, 136° E. In the evening of the 16th the sky assumed a threatening appearance in Hongkong similar to the appearance presented by the sky over the West Coast of Ireland and in other places before a storm.

At 10 a. on the 17th the centre appears to have been in 21° 24' N, 114° 18' E. The barometer had fallen in Hongkong and also along the Yangtze River but risen along the Coasts of the Formosa Channel and in Luzon. The weather was cloudy, the humidity great and the temperature low in Hongkong, where it was blowing a strong E breeze. The S.S. *Camorta* about 40 miles West of the centre experienced a NW gale with fearful squalls (barometer 29.59 corrected) and heavy rain. At 8 a. it was noticed that the sky became very bright towards NE for about 10 minutes and then overcast again, and again at 10 a. the sky got clearer towards SE. The sea was very high.

The S.S. *Marcia*, south of the centre reported strong WSW wind, strong swell and overcast and cloudy weather. Strong S breezes and wet weather were experienced in 20° N, 119° E.

OBSERVATIONS MADE DURING THE TYPHOON OF 17TH AUGUST, 1885.

Date.	Hour.	MACAO.					HONGKONG.					CANTON.				
		Bar.	Ther.	Hum.	Wind.		Nebulosity.	Bar.	Ther.	Hum.	Wind.		Nebulosity.	Bar.	Wind.	
					Dir.	Force.					Dir.	Force.			Dir.	Force.
6....	4 a.	29.737	81	85	NNE	1	6	29.740	80	85	NE	2	8	29.74	S	1
	10 a.	.764	84	71	NE	1	7	.770	82	66	E	4	4	.78	NE	1
	4 p.	.677	87	68	E	1	6	.676	82	73	E	4	10	.72	NE	2
	10 p.	.729	82	75	E	1	9	.730	80	78	ENE	5	10	.73	SW	3
	4 a.	.650	81	78	ENE	3	10	.650	77	91	NE	3	10	.72	SE	1
	10 a.	.617	79	91	NE	2	10	.623	80	89	E	6	10	.70	SE	2
	11 a.	.605	...	...	NNE	...	...	.610	81	87	E	6	...	...	...	...
	Noon.	.570	...	...	NNE	...	...	.573	81	85	E	7	...	.68	E	2
	1 p.	.524	81	87	NNE	4	9	.551	80	91	E	8	10	...	...	...
	2 p.	.492	80	91	NNE	4	10	.523	80	85	SE	8	...	.65	NE	3
7....	3 p.	.446	80	91	N	4	10	.528	79	87	SSE	9	...	...	...	...
	4 p.	.366	80	93	N	5	10	.567	79	84	SSE	7	10	...	...	...
	5 p.	.371	80	91	WSW	4	10	.586	78	90	S	7	...	...	...	...
	6 p.	.495	78	97	SW	6	10	.625	79	80	SSE	7	...	.60	ENE	4
	7 p.	.578	77	100	SSW	7	10	.651	78	89	S	6	10	...	...	...
	8 p.	.621	78	95	SSW	9	10	.684	79	87	S	5	...	...	...	...
	9 p.	.673	78	95	SSW	5	10	.709	79	86	S	4	...	.59	ENE	8
	10 p.	.693	78	93	SSW	2	10	.733	79	86	S	3	10	...	...	...
	4 a.	.710	79	91	S	1	10	.734	80	77	S	3	10	.71	ESE	2
	10 a.	.793	78	95	S	1	9	.824	77	88	S	4	10	.77	SE	1
8....	4 p.	.807	78	95	S	1	10	.828	78	91	S	1	10	.77	SE	3
	10 p.	.829	78	95	SW	1	9	.857	80	84	SSE	4	10	.81	SE	2

At 10 a. on the 18th the centre appears to have been about $23^{\circ} 20' N$, $110^{\circ} 35' E$. The barometer was rising at all the stations along the Coast and in the Philippines except Pakhoi, Hoihow, and Manila. Moderate SW breezes prevailed in China, and the weather was wet in Southern China. At Pakhoi it blew a gentle W breeze accompanied by rain. The depression appears to have lost the character of a typhoon as soon as it entered the mainland, and on the whole to have been shallow and of short duration. On the mainland it did not blow strongly till the centre was within 40 or 50 miles, but at sea strong winds were felt within 100 miles. The clouds stretched as far as 200 miles in front of the centre.

At 10 a. on the 18th Typhoon VII. appears to have been about $12^{\circ} N$, $135^{\circ} E$. The British barque *Mount Lebanon* in $15^{\circ} N$, $131^{\circ} E$ had a light NNW breeze (the wind having backed from E.N.E. the previous day), and the barometer (29.90 corrected) began to fall. At Iloilo the barometer was rising and the day was fine and calm. A light wind from NE was registered at 1 p.

At 10 a. on the 19th the centre appears to have been about $12\frac{1}{2}^{\circ} N$, $134^{\circ} E$. The *Mount Lebanon* in $15^{\circ} N$, $129^{\circ} E$ had a moderate NW breeze, squally weather and the barometer had fallen nearly 0.1 inch. The barometer had also fallen in Iloilo, where the air was calm and detached clouds were observed. The barometer was rising along the Coast of China and light SW breezes prevailed. The temperature and humidity were rather high and the sky clouded in the South, where local squalls connected with thunderstorms were observed. The sky was on the whole clear in the North.

At 10 a. on the 20th the centre appears to have been in about $14^{\circ} N$, $133^{\circ} E$. The *Mount Lebanon* in $15^{\circ} N$, $127^{\circ} E$ had still a moderate NW breeze and squally weather. The barometer had fallen to 29.75. The British schooner *Linnet* in $19^{\circ} N$, $127^{\circ} E$ had a strong N breeze and cloudy and squally weather. The barometer had fallen at all stations in China and Luzon. The sky was overcast along the Southern Coast, where the temperature and humidity continued high. Gentle S breezes prevailed along the whole extent of the Coast. Over Luzon the sky was blue and gentle to fresh NNW breezes were reported. In Iloilo the barometer was beginning to fall. The weather was fine and calm. At times a light SW breeze was felt. At 4 p. a fresh NW breeze was reported from Bolinao.

At 10 a. on the 21st the centre appears to have been in $15^{\circ} N$, $131^{\circ} E$. The *Mount Lebanon* in $15^{\circ} N$, $127^{\circ} E$ had a fresh W breeze, squally weather and the barometer had fallen to 29.58. The *Linnet* in $18^{\circ} N$, $124^{\circ} E$ reports a strong N breeze and cloudy weather. In Iloilo it blew a gentle SW breeze. The weather was calm and cloudy. The barometer had fallen here and in Luzon as well as in Southern China but had risen in Northern China. It blew a moderate to strong NW breeze and the sky was blue over Luzon. In China the temperature and humidity continued high. The weather was fine with detached clouds and light variable breezes.

At 10 a. on the 22nd the centre appears to have been about $16^{\circ} 52' N$, $128^{\circ} 43' E$. The *Mount Lebanon* in $15^{\circ} N$, $128^{\circ} E$ was experiencing a whole gale from W, and the weather was very rough. The barometer fell to 29.22 at 1 p. and the wind began then to back towards S. The *Linnet* in $18^{\circ} N$, $124^{\circ} E$ had a NNW gale. It blew a moderate NW gale at Bolinao during the previous night with squally weather accompanied by thunder and lightning. In Iloilo it was squally, the breeze was SW and the barometer reached its minimum in the afternoon. Gentle NE breezes blew in Formosa and in the Channel and the barometer had fallen there as well as along the SE Coast of China and in Luzon. It had risen in Tonquin and along the Yangtzejiang. Along that river and in Northern China and Corea light S breezes prevailed and the weather was fine there as well as in Southern China. In the evening it blew in furious squalls and it was raining very heavily at Bolinao, but this appears to be due more to a local thunderstorm than to the typhoon.

At 10 a. on the 23rd the centre appears to have been about $19^{\circ} 10' N$, $125^{\circ} 40' E$. The *Mount Lebanon* in $16^{\circ} N$, $129^{\circ} E$ had a strong S gale and rough weather. The barometer had risen to 29.44. The *Linnet* in $18^{\circ} N$, $125^{\circ} E$ encountered a hard gale. The weather was squally and wet and the sea was heavy. The ship was drifting towards East. The weather was squally with a SW breeze in Iloilo. In Manila it blew a fresh WSW breeze. The air was misty. The barometer was 29.59, the lowest reported. At Bolinao it blew a moderate W gale with furious squalls and heavy rain. About Northern Formosa it blew a fresh NE breeze, at S. Cape a gentle NNW breeze, and along the Southern Coast of China the weather was remarkably fine and the breezes light and variable. Gentle SE breezes prevailed in Northern China. The barometer had fallen south of the Yangtzejiang, and risen along and North of that river. In the evening on the same day it blew a moderate NE gale north of Formosa, a moderate N gale in the Channel and light variable breezes at S. Cape. The weather was misty but fine. A moderate W gale was reported from Bolinao, where it was showery.

At 6 a. on the 24th the centre appears to have been in $21^{\circ} 43' N$, $122^{\circ} 0' E$. A moderate W gale was reported from Bolinao. At South Cape, where a light W breeze had been registered, a fresh NW breeze sprung up. The weather became overcast and misty, but only drizzling rain was registered although the centre of the typhoon shortly after passed close to the north of the lighthouse. The *Faugh a Ballaugh* in $22^{\circ} 35' N$, $119^{\circ} 54' E$ experienced a NNW wind blowing with full typhoon force although this German barque was twice as far from the centre as the S. Cape lighthouse, a circumstance which must be attributed to the influence of the high chain of mountains. At Fisher Island it was blowing a furious N by W gale with heavy squalls of wind and rain. An increasing N gale had in fact been felt the whole of the previous day. In Northern Formosa and in the Northern entrance to the Channel it blew a strong NE gale and wet weather set in about this time.

At 9 a. the centre appears to have been in $22^{\circ} 2' N$, $121^{\circ} 19' E$ and at 10 a. in $22^{\circ} 9' N$, $121^{\circ} 3' E$. It blew a fresh W gale at Bolinao, where the weather was overcast and squally. A light SW gale was registered at Iloilo. It blew a strong S breeze to the Eastward of Luzon. At S. Cape it was a strong WNW gale and drizzling rain was falling. North of Formosa it blew a NE storm and a strong NW typhoon at Fisher Island and as far north as Steep Island it was blowing a strong NE breeze. Moderate NW breezes prevailed along the SE Coast of China. It was raining in the Formosa Channel and the weather was fine elsewhere, detached clouds covering Southern and Eastern China. The temperature was high and the humidity rather low along the Coast. The barometer had fallen in Formosa and to a less extent along the SE Coast. It was steady in Tonquin and had risen in Luzon and at stations north of Shanghai.

At noon on the 24th the centre appears to have been in $22^{\circ} 27' N$, $120^{\circ} 43' E$ at 3 p. in $23^{\circ} 1' N$, $28' E$ and at 6 p. in $24^{\circ} 4' N$, $120^{\circ} 23' E$. Between these hours it was moving northwards along the western slope of the chain of mountains. The fact that the centre of this typhoon, which is seen to have been an unusually widespread disturbance, was able to cross heights of about two thousand feet and that the centre for hours remained on high mountainous ground, deserves to be noted in connection with the fact that a disturbance so suddenly calms down, when the centre enters the mainland. This typhoon, while its centre was situated on the Island of Formosa was however surrounded by the dampness of which its store of aqueous vapour was recruited, while a typhoon on the mainland is generally surrounded by dry land. The fact that the centre's situation on the mountains does not cause a decrease in the violence of the storm indicates likewise that the nucleus of the disturbance is in tropical hurricanes situated at a considerable height above the ground, a fact that is proved by various other considerations.

When the centre crossed the parallels of Takow and Anping (Taiwan-fu) it caused a N backing W typhoon in those places with heavy rain.

About 6 p. the centre turned NW and WNW and crossed the Channel, which caused a strong N veering NE typhoon to be felt north of the centre and a W typhoon at Fisher Island. The N and NE gales at the Northern entrance to the Channel did not veer as quickly as the progress of the centre would have led one to expect. They blew with the steadiness pointed out in previous reports as characteristic of that locality, but began to veer towards E shortly after the passage of the centre. To the energy of these N gales the fact of the centre turning Westward at 6 p. must be attributed.

At 9 p. the centre appears to have been in $24^{\circ} 39' N$, $119^{\circ} 42' E$, at midnight in $24^{\circ} 54' N$, $118^{\circ} 6' E$ and at 3 a. on the 25th in $25^{\circ} 25' N$, $118^{\circ} 17' E$. At midnight the force of the disturbance was much decreased, the lighthouses and vessels between which it passed registering only strong gales but a whole E gale blew still between Foochow and Tamsui and a SW storm was experienced by the *Faugh Ballaugh* in $22^{\circ} 8' N$, $120^{\circ} 2' E$. At 3 a. it blew a whole SE gale at Foochow and a strong W breeze about Swatow. In the middle of the Formosa Channel it blew fresh SSW gales.

The amount of cloud was rather irregularly distributed round the centre of this typhoon but it was on the whole densely overcast within 200 miles in front of the centre. Of course the clouds extend always much farther behind the centre, where the wind blows from S and SW. The rainfall was also irregular. There fell 8.5 inches at Takow, 4.3 inches at Fisher Island and nearly as much between Foochow and Keelung but only 1.7 inches at S Cape. The strong wind was likewise irregularly distributed as it blew in some places far from the centre with greater force than in others nearer the centre. The area with strong wind was unusually extensive, and this characterised this typhoon from its first appearance in the Pacific till it was lost. It is on account of the uncertainty of the index-corrections and for other reasons impossible to ascertain the gradients corresponding to each windforce but the following appear to be on the whole nearly correct: A gradient of 0.08 inches in 15 miles corresponds to force 11, 0.05 inches to force 9, 0.03 inches to force 6 and 0.02 inches to force 4. On an average the angle between the wind and the gradient amounted to 39° in the semi-circle in front of the centre and to 45° behind the centre. The temperature was about 77° near the centre and 85° at a distance of 500 miles from the centre.

At 10 a. on the 25th the centre appears to have been about $26^{\circ} 15' N$, $117^{\circ} 5' E$. The barometer had risen over Luzon (Manila at 10 a. reported 29.86), where the weather was hot and rather dry. Strong S breezes blew round Northern Luzon. Round the Gulf of Tonquin it blew gentle W breezes. The barometer had fallen at Pakhoi and risen slightly at Haiphong. Moderate S gales and squally weather prevailed in the Formosa Channel. At Foochow it blew a whole gale from SE; at sea midway between Foochow and Ningpo it blew a whole gale from E, and between Ningpo and Shanghai it blew a strong breeze from ESE. Along the Yangtzekiang the barometer had fallen. At Chinkiang the sky was blue and it blew a strong E breeze, but at Kiukiang it blew a moderate NE gale and the weather was overcast and showery. The weather was foggy in places in the Yellow Sea. The barometer was rising slightly in Korea and the weather there was fine.

At 10 a. on the 26th the centre may have been in about $30^{\circ} N$, $115^{\circ} E$, that is about midway between Hankow and Kiukiang. Moderate to fresh SW breezes prevailed over the Southern China and over the China Sea. The barometer had risen and the temperature and humidity were moderate. Thunderstorms were frequent to the south of the centre of the typhoon. Moderate SE breezes and

Fine weather prevailed east of it. At Kiukiang the wind had calmed down on the previous day and a light SE breeze was registered. The weather was dull and threatening with occasional light showers. At Hankow a light NE breeze was registered and at both stations the height of the barometer was 29.64. The following days moderate S winds, high temperatures and humidities and overcast and wet weather prevailed in Southern China. The centre of the typhoon appears to have been moving NNW on the 26th but the depression had filled up and the disturbance had lost the character of a tropical hurricane already during the night following the 25th. Several storms moving Eastward subsequently crossed the Sea of Japan but there is nothing to show that any of them was connected with the past typhoon.

The following are the most important observations made during this typhoon. They have been reduced and corrected as far as possible:—

DATE.	LAMOCKS.				SWATOW.				BREAKER POINT.				HONGKONG.								
	Bar.	Th.	Wind.		Bar.	Th.	Wind.		Bar.	Th.	Wind.		Bar.	Th.	Wind.						
			Dir.	Force.			Dir.	Force.			Dir.	Force.			Dir.	Force.	Weather.				
1885.																					
August	Bar.	Th.	Dir.	Force.	Bar.	Th.	Dir.	Force.	Bar.	Th.	Dir.	Force.	Bar.	Th.	Dir.	Force.	Weather.				
24th,	3 a.	29.62	82	w	4	cm.	29.54	81	NW	1	b.	29.56	80	SW	2	c.	29.60	78	w	4	ce.
	6 a.	.56	84	NW	4	"	..	..	..	..	.57	83	WNW	"	..	.58	78	"	3	..
	9 a.	.56	86	WNW	5	"	.51	84	WNW	2	o.	.49	89	NW	4	..	.59	81	"	4	
	10 a.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.59	83	"	..
	11 a.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.56	83	"	..
Noon	1 p.	.53	86	"	"	"	..	..	..	..	..	..	..	..	..	..	.54	84	"	"
	2 p.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.51	85	"	"
	3 p.	.44	81	w	5	orm.	.38	86	NW	3	"	.39	93	w	2	..	.48	86	"	"	
	4 p.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.47	87	"	"
	5 p.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.46	86	"	3
	6 p.	.37	78	"	"	"	..	..	..	..	..	..	..	..	..	..	.45	86	"	"
	7 p.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.45	86	"	"
	8 p.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.46	85	"	"
	9 p.	.36	76	WSW	6	"	..	..	..	..	..	..	..	..	..	..	.47	84	"	"
	10 p.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.47	86	WNW	"
	11 p.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.46	86	"	"
Midt.	.28	76	"	7	"	"	..	..	..	..	..	..	..	..	..	..	.44	84	"	"
25th,	1 a.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.42	84	"	"
	2 a.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.40	84	"	3
	3 a.	.20	73	"	8	"	.29	78	NW	6	or.	.26	80	WSW	5	..	.39	84	w	"	
	4 a.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.38	84	"	"
	5 a.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.39	84	WNW	"
	6 a.	.20	76	sw	8	"	..	..	..	..	..	..	..	..	..	..	.40	83	w	2
	7 a.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.42	83	WSW	"
	8 a.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.42	84	w	"
	9 a.	.20	76	"	"	"	..	..	..	..	..	..	..	..	..	..	.44	85	"	1
	10 a.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.45	86	WSW	2

TAMSUL.				KEELUNG.				CHAPEL ISLAND.				AMOY.							
DATE.	Bar.	Th.	Wind.		Bar.	Th.	Wind.		Bar.	Th.	Wind.		Bar.	Th.	Wind.				
			Dir.	Force.			Dir.	Force.			Dir.	Force.			Dir.	Force.			
1885, August 1st	29.24	79	NE	10	or.	29.24	83	NNE	7	or.	29.35	N	5	omr.	29.44	85	NNW	3	o.
2d	.09	78	"	11	"	28.95	83	"	"	"	.29	NNW	6	"	.44	86	"	3	"
3d	29.03	75	"	10	"	29.01	84	ESE	11	or.	.15	"	8	"	.42	87	"	4	oqr.
4d	28.93	76	"	"	"	29.01	84	ESE	11	or.	.15	NW	7	"	.41	88	N	"	oqr.
5d	.89	77	"	"	"	29.01	84	ESE	11	or.	.10	"	7	"	.37	91	"	5	"
6d	.88	79	"	9	"	29.01	84	ESE	11	or.	.07	"	8	odm.	.26	91	NNW	"	"
7d	.87	79	"	8	"	29.01	84	ESE	11	or.	.03	"	8	odm.	.21	90	"	"	"
8d	.87	79	"	"	"	29.01	84	ESE	11	or.	29.00	WNW	"	orm.	.11	83	W	7	"
9d	.83	78	"	"	"	29.01	84	ESE	11	or.	28.97	"	"	"	.08	84	NW	4	oqr.
10d	.80	78	"	"	"	29.01	84	ESE	11	or.	.95	"	9	"	29.02	79	SW	3	orm.
11d	.87	78	"	9	"	29.01	84	ESE	11	or.	.98	"	8	"	.06	81	"	6	"
Midt.	29.09	76	"	11½	"	29.01	84	ESE	11	or.	.96	"	8	"	.11	83	W	7	"
12d	1 a.	"	"	"	"	29.01	84	ESE	11	or.	.97	"	8	"	29.01	82	W	4	oqr.
13d	2 a.	"	"	"	"	29.01	84	ESE	11	or.	.99	"	8	"	28.96	80	"	4	"
14d	3 a.	"	"	"	"	29.01	84	ESE	11	or.	.97	"	8	"	28.98	79	SW	3	"
15d	4 a.	"	"	"	"	29.01	84	ESE	11	or.	29.02	"	7	odm.	29.08	79	SW	3	orm.
16d	5 a.	"	"	"	"	29.01	84	ESE	11	or.	.13	"	6	"	.16	80	S	4	odm.
17d	6 a.	"	"	"	"	29.01	84	ESE	11	or.	.18	"	6	"	.21	SSW	"	4	"
18d	7 a.	.49	81	SE	8	"	29.40	85	SE	6	omr.	.25	"	"	.25	80	"	4	orm.
19d	8 a.	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
20d	9 a.	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
21d	10 a.	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"

OCKSEU.				TURNABOUT.				MIDDLE DOG.				FOOCHOW.								
DATE.	Bar.	Th.	Wind.		Bar.	Th.	Wind.		Bar.	Th.	Wind.		Bar.	Th.	Wind.					
			Dir.	Force.			Dir.	Force.			Dir.	Force.			Dir.	Force.				
1885, August 1st	29.20	77	NNE	8	omr.	29.22	...	N	8	omr.	29.45	80	NE	8	omr.	29.30	...	NNE	7	oqr. or.
2d	.17	77	"	"	"	29.22	...	"	"	"	.37	77	NNE	9	emq.	.23	...	"	9	"
3d	.08	77	"	"	omqd.	.12	...	"	9	"	.34	77	"	10	omqd.	.20	...	"	9	"
4d	.05	77	"	9	"	.08	...	"	10	"	.32	...	"	"	"	.15	...	"	"	
5d	29.04	..."	"	"	"	29.02	...	"	"	"	.30	...	"	"	"	...	...	...	...
Noon.	28.95	80	N	10	"	28.94	...	"	"	"	.26	79	"	"	om.	...	...	...	...
6d	.85	...	"	"	"	.90	...	"	"	"	.20	...	"	"	omqr.	...	NE	"	"	
7d	.79	...	NNE	"	"	.85	...	"	11	"	.16	...	"	"	omqd.	.10	...	NNE	"	
8d	.75	77	"	"	"	.80	...	"	"	"	.10	77	"	"	omqr.	.07	...	"	"	
9d	.71	...	"	"	"	.74	...	"	"	"	.07	...	ENE	"	11	...	...	...	...
10d	.67	...	"	"	"	.74	...	"	"	"	.02	76	"	11	"	29.02	...	"	11	"
11d	.65	76	"	"	"	.74	...	"	"	"	.02	ESE	10½	"	"	.98	...	"	"	"
Midt.	.63	...	"	"	"	.69	...	NNE	11	"	29.00	...	"	11	"	.98	...	"	"	"
5th, 1 a.	.60	...	"	"	"	.65	...	NE	"	"	28.95	76	"	"	"	.98	...	"	"	"
2 a.	.61	77	"	"	"	.64	...	ENE	"	"	.95	...	"	"	"	.98	...	"	"	"
3 a.	.67	...	"	"	"	.68	...	"	"	"	.96	...	"	"	"	.97	...	"	"	"
4 a.	.68	...	NE	9	"	.70	...	"	10	"	28.97	75	"	10½	"	28.95	...	"	"	"
5 a.	.71	77	"	"	"	.82	...	"	9	"	29.01	...	"	10	"	...	SE	"	"	"
6 a.	.73	76	ESE	7	ond.	.84	...	"	"	"	.08	75	"	"	omr.	...	...	...	...	"
7 a.	28.76	...	SSE	7	"	.91	...	ESE	"	"	...	...	"	"	"	...	...	...	...	"
8 a.	...	...	"	"	"	28.97	...	"	8	"	...	...	...	9	"	29.10	...	...	9	"
9 a.	29.00	75	"	6	"	29.06	...	"	"	"	...	...	...	...	"	...	...	...	...	"
10 a.	...	...	"	"	"	...	...	"	"	"	...	...	...	...	"	...	...	...	...	"

At 10 a. on the 29th it was noticed that the barometer was beginning to fall in the East and had risen in the West. The temperature was moderate, the humidity great and the weather overcast and wet. The winds were very light. W breezes prevailed in the China Sea and S breezes in the Formosa Channel and farther north. The American barque *Amy Turner* in 17° N, 138° E had a NNE wind, which increased during the night accompanied by a heavy NW swell. This was due to Typhoon VIII, which appears to have been at the time in about 15° N, 139° E.

At 10 a. on the 30th the centre was in about 16° N, 137° E. The barometer was falling over Luzon, Formosa and along the SE Coast. It was rising in Tonquin and along the Yangtzekiang. Light W breezes and fine weather were registered in the China Sea. Light NW breezes and fine weather were reported from Luzon. Along the S and SE Coast of China light S breezes prevailed and light NE breezes North of Formosa. The temperature was low, the humidity high and the weather overcast and wet.

At 10 a. on the 31st the centre appears to have been about $17^{\circ} 22' N$, $135^{\circ} 15' E$. The barometer was falling slowly in Luzon and Formosa and was steady along the SE Coast, but had risen elsewhere in China and in Korea. The temperature and humidity were rather high but the weather was improving. Light NW breezes were reported from Luzon. Light SW breezes prevailed along the China Coast. The barque *Amy Turner* had experienced strong wind and heavy squalls veering first to ENE and then backing through N to W at 6 a. on the 1st. The barometer remained at that hour still at its lowest reading (29.10 uncorrected) and began to rise slowly. The following day it blew very hard from SW. But the weather cleared up and the wind moderated at midnight on the 1st. The sea was comparatively smooth while the *Amy Turner* went through the typhoon.

At 10 a. on the 1st the centre appears to have been in $19^{\circ} 20' N$, $133^{\circ} 45' E$. The barometer had fallen in Luzon and in Southern China. The temperature was rather high, the humidity rather low and the weather fine. Very light SW breezes prevailed in China and light airs from NW in Luzon and Formosa.

At 10 a. on the 2nd the centre may have been about $21^{\circ} N$, $132^{\circ} E$. The barometer had fallen at all stations in the Far East except Haiphong. The temperatures and humidities were rather high in China and the weather cloudy and wet. Light W airs and fine weather were reported from Luzon, light NW airs and fine weather were registered in Formosa and gentle SW breezes prevailed in Southern and SEastern China.

At 10 a. on the 3rd the centre may have been about $24^{\circ} N$, $131^{\circ} E$. The barometer was falling in Formosa and along the SE Coast of China, but had risen in Luzon, in Tonquin, in Northern China and in Southern Korea. Gentle SW breezes and fine weather prevailed in Luzon and in the China Sea. At Middle Dog it blew a fresh NE breeze, at Foochow the weather was squally and wet and at Steep Island it blew a moderate NNE breeze.

At 10 a. on the 4th the centre appears to have been in $27^{\circ} N$, $129^{\circ} E$. The barometer had risen at all the stations except those in Formosa, in SWestern Japan and at the lighthouses between Ningpo and Shanghai. The temperature was rather high and the humidity moderate along the SE Coast of China. Gentle SW breezes prevailed over the China Sea, gentle NE breezes in Northern Formosa and in the Channel. Moderate E breezes blew between Nagasaki and Shanghai but a short deep swell with a peculiar irregular appearance was observed near the Coast of Japan and a moderate NNE breeze was registered at Steep Island. In the course of the day the barometer began to fall slightly in Kiusiu (SW Japan) but rose elsewhere in Japan. The winds were N and E and the weather fair on the whole, but in the evening an E gale blew SW of Japan.

At 10 a. on the 5th the centre appears to have been in $29^{\circ} 22' N$, $128^{\circ} 25' E$. The barometer had fallen slightly over Japan, and Southern Korea and along the Yangtze River as far as Kiukiang. It had risen a few hundredths of an inch outside this area. The temperature was high, the humidity moderate, the weather cloudy and light W airs prevailed round the China Sea. Gentle N breezes were registered about the Northern entrance to the Formosa Channel and also in Shanghai. It blew a fresh NNW breeze at Steep Island, where the barometer had fallen about a tenth of an inch. At Nagasaki the barometer had fallen a quarter of an inch and a fresh NE breeze was reported from there. Along the Southern shore of Korea the barometer had fallen about a fifth of an inch and it blew a moderate or fresh E breeze. At Fusun it blew a strong NE breeze the barometer had not fallen a tenth, but the weather was overcast, gloomy and wet. Lightning had been observed up to the previous midnight and was seen in the Korea Straits in the morning. Between Quelpart and Nagasaki it blew a fresh NE gale and between SW Japan and the centre of the typhoon a whole gale from E was reported by H. M. S. *Cleopatra*. The sea was very heavy and confused from Eastward, the squalls were heavy and spoon-drift was flying very thickly so as to obscure every object at two ship's lengths distance.

At 2 p. on the 5th the centre appears to have been in $30^{\circ} 20' N$, $128^{\circ} 11' E$. The barometer had fallen over Japan, the lowest reading being reported from Kagoshima, where it blew an E gale. N and E winds and clear weather prevailed in S Nippon but it was cloudy elsewhere with rain in Kiusiu. The temperature had fallen much except near the inland sea. A strong NE gale blew in the Korea Strait. It blew a strong N breeze at Steep Island where the air was misty but not overcast. H. M. S. *Cleopatra* about 60 miles ENE of the centre of the typhoon encountered a whole gale from E with heavy and sudden squalls, a mountainous and confused sea from E and continuous rain. At Port Hamilton it blew a fresh NE breeze, with passing showers of rain.

At 9 p. on the 5th the centre appears to have been in $31^{\circ} 2' N$, $128^{\circ} 2' E$. H. M. S. *Cleopatra* about 40 miles E of the centre experienced a SE storm. The barometer had fallen to 28.48, the lowest reading reported. The barometer had fallen in Korea and in W Japan but risen in SW Kiusiu. Strong E winds prevailed with mostly overcast weather and rain in the West. The temperature had risen in Southern Japan but fallen elsewhere in that country. Strong NE gales were reported from Southern Korea. In the Yellow Sea H. M. S. *Pegasus* experienced a strong NE breeze and a falling barometer. It blew moderate NE breezes in Northern Korea and at the Shantung Promontory.—At 10 p. and midnight the Austrian Gun-boat *Nautilus* about 90 miles WNW of the centre encountered a N storm with a very high N sea. The barometer had fallen to 28.95.

At 1 a. on the 6th the centre appears to have been in $31^{\circ} 35' N$, $127^{\circ} 55' E$. The ships referred to above report still storm-force of wind. It had risen to a whole gale in Southern Korea.

At 6 a. on the 6th the centre appears to have been in $32^{\circ} 42' N$, $127^{\circ} 10' E$. The constant NE blowing out at the Korea Straits was evidently now deflecting the typhoon from the path it had herto followed and causing its course to be turned NW westward, thus furnishing an analogy to the effect so frequently, though not invariably, produced by a heavy NE gale in Northern Formosa on a typhoon proceeding northwards in the Channel. Nagasaki reported the lowest reading 29.41 of the barometer in Japan and a S gale. SE winds prevailed with rain in the west. Strong NE gales blew Southern Korea, but the rain that fell during this typhoon does not appear to have been as heavy as tropical hurricanes. From 9 a. on the 5th till 9 a. on the 7th there fell 3.72 inches in Fusan and 40 in Yuensan.

At 10 a. on the 6th the centre appears to have been in $33^{\circ} 12' N$, $126^{\circ} 7' E$. A strong S breeze blew at Nagasaki, a fresh SE gale in Southern Korea, a strong ENE breeze in Northern Korea and a fresh NNE gale in the Yellow Sea SE of the Shantung Promontory, at which a strong NE breeze was registered. Between Chinkiang and Ningpo fresh NW breezes were registered. Light breezes and partly clouded weather prevailed in Southern China, where the barometer was nearly steady. It had risen over Formosa and also over Luzon.

At 2 p. on the 6th the centre appears to have been in $34^{\circ} 42' N$, $125^{\circ} 12' E$. Being sheltered towards NE by the mountainous land of Korea, it had resumed its course towards the north. A fresh SE breeze was registered in Southern Korea, strong S breezes in SW Japan, moderate WSW gales between Shanghai and Nagasaki, a fresh W breeze at Steep Island and fresh NE gales at Shantung and at Yuensan in Northern Korea.

On the 5th and the 6th the isobars were very nearly circular. The radius of the isobar corresponding to 29.60 was about 285 miles, the radius corresponding to 29.50 was about 230, to 29.40 about 80, to 29.30 about 120, to 29.10 about 100 and to 28.90 about 80 miles. It appears that on the whole a gradient of 0.02 inches in 15 miles corresponded to force 6, a gradient of 0.03 to force 7, a gradient of 0.05 to force 8, a gradient of 0.07 to force 9, a gradient of 0.10 to force 10 and a gradient of 0.20 to force 11. Full typhoon force was not reported. The radius of the area with windforce at least 6 was about 310 miles.

The average angle between the direction of the wind and the gradient was 70° in the left front, 90° in the right front, 76° in the left back and 77° in the right back quadrant. The greater incurvature of the wind in the right front quadrant was due to the wind there blowing from the mountainous shores, being thus subject to great friction and also to the steady NE wind in the Korea Strait which evidently caused the typhoon to avoid the Strait. The mean of the other quadrants is 74° or 70° in front of and 77° behind the centre.

The rain that fell in connection with this typhoon does not appear to have been so heavy as is the rule in a tropical hurricane, nor was it surrounded by a well defined area of fine weather and clear sky. It was raining within 200 miles of the centre on the 5th and during the following night but outside of this limit showers fell in many places, and about 10 a. on the 6th the rain at Port Hamilton ceased to be continuous although the centre was within about 70 miles.

At 9 p. on the 6th the centre appears to have been in $37^{\circ} 15' N$, $124^{\circ} 25' E$. The N wind at NE Shantung Promontory had reached the force of a strong gale and the barometer had fallen to 29.48, the lowest reading reported. The weather was overcast, squally and wet. At Newchwang it blew a gentle NE breeze. At Yuensan it blew a NE storm with hurricane-like gusts. The weather was as bad as in Shantung. About 3 p. the sea had broken in and had overflowed the settlement. It rained from 2 p. on the 6th till 3 a. on the 7th. Then fog set in and lasted till 10 a. after which the weather remained overcast and gloomy. In Southern Korea it blew a moderate SW gale at 9 p. on the 6th. The weather remained overcast and gloomy.

At 10 a. on the 7th the centre appears to have been about $39^{\circ} 30' N$, $124^{\circ} 10' E$ just about entering the land, but the depression was filling up and the wind had calmed down except at Shantung Promontory where a W gale was registered. The weather was overcast and wet with drizzling rain in the north and also overcast, gloomy and damp in Southern China, where gentle SW breezes prevailed with a rising barometer. It blew a fresh SW breeze in Southern Korea.

At 10 a. on the 8th the centre may have been about $44^{\circ} N$, $127^{\circ} E$. It blew a strong SE breeze at Wladivostock, where the weather was overcast and rainy. At 3 p. the lowest reading of the barometer 29.69 was reported from there. It was then blowing a moderate SE gale. At Newchwang the barometer was steady at 29.86. The wind had backed through W to S, but it was nearly calm. The following day the barometer had risen at these stations. On the morning of that day a moderate SW gale was reported from Wladivostock.

Between 5 p. and 6 p. on the 5th September the P. M. S. S. *City of Rio de Janeiro* in about $35^{\circ} 33' N$, $148^{\circ} 37' E$ passed through the centre of a storm. The wind shifted from SSE to NNW, from which quarter a storm was experienced when the centre was past. The lowest reading of the barometer reported was 28.75.

On the 9th of October the barometer began to fall in Luzon. Gradients were moderate for NE winds and increased during the following days. The humidity continued moderate over the Philippines and in SE China. The weather was fine. On the morning of the 13th the lowest reading of the barometer was registered at Iloilo. It was blowing moderately from SW, which continued during the next few days, and the weather was squally. At 10 a. the centre of Typhoon IX may have been about $16^{\circ} N$, $132^{\circ} E$. At 4 p. the lowest reading of the barometer 29.77 was reported from Manila. It blew a gentle NW breeze accompanied by detached clouds between there and Bolinao.

At 10 a. on the 14th the centre may have been about 21° N, 131° E. A fresh N breeze accompanied by detached clouds was reported from Bolinao. The weather was fine and dry but very hot both in Manila and in SEastern China. Strong N breezes were felt along the E Coast of China.

At 10 a. on the 15th the centre was in 27° N, 132° E. At the time the British barque *Areola* was situated within a few miles of the centre. The barometer fell to about 27.4 (uncorrected). Heavy rain and full typhoon force of the wind were encountered before the centre. The S.S. *City of Peking* bound from Yokohama to Hongkong encountered a terrific NE typhoon, with heavy confused sea and thick rain at 1 a. on the 16th, when the lowest reading 29.05 of the barometer was registered. The wind backed to NW in the course of the morning and calmed down to a fresh breeze. The S.S. *Bellona* bound from Kobe to Shanghai ran into the NE quadrant of the typhoon and encountered a NE gale increasing to typhoon force at 10.30 p. accompanied by a terrible sea. The lowest reading of the barometer 28.82 (uncorrected) was registered at 1 a. on the 16th. Subsequently the wind backed to NW and decreased in force.

At 10 a. on the 16th the centre appears to have been in 35° N, 141° E. The force of this typhoon was felt on shore in Japan as reported in the Tridaily Weathermaps of the Tokio Observatory.

In the beginning of November several deep depressions accompanied by violent storms travelling eastward passed across Northern China, Korea and the Sea of Japan. On the 5th the barometer began to fall over Southern China and the Philippine Islands, but it was rising in the north, so that gradients for NE winds increased. Moderate NNE gales were encountered by ships near Cochin-China and fresh N breezes in the Mindoro Sea. At 10 a. on the 6th the centre of Typhoon X appears to have been about 13° N, 126° E. Light airs and fine weather were reported from Luzon. The air was very dry along the SE Coast of China but damp in Luzon. In the afternoon the inhabitants of Camarines Nortes (14° N, 122° E) became aware of the approach of the typhoon, though the barometer was registered 29.80. In the evening it blew in strong gusts from the NE and the wind began to back towards N. The barometer fell quickly in the course of the night and it blew a storm from NW. At 8.35^m next morning the wind calmed down for about 2 minutes and the sky cleared.—The S.S. *Whampoa* at the time in the Mindoro Sea experienced a fresh N breeze, a NE swell, very hot and cloudy weather and passing showers of rain.—Cloudy and wet weather with a S breeze and falling barometer were registered at Iloilo.

At 10 a. on the 7th the centre appears to have been in $14^{\circ} 22'$ N, $122^{\circ} 38'$ E. During the preceding hour the wind had backed to W in Camarines Nortes. The lowest reading of the barometer 28.19 was registered at 10.15 a. The wind blew then with great force from SW and after 11 a. from S but calmed down after 2.15 p. At 10 a. a moderate NW breeze and overcast squally and wet weather was reported from Manila (barometer 29.74). During the day it backed towards W a moderate WNW gale was reported at 4 p. and it blew a fresh W gale at 7 p. The lowest reading of the barometer 29.47 was registered about 6 p.—At Bolinao it blew a fresh NNE gale at 4 p. and a heavy swell was observed in the sea. At 9 p. it blew a strong NNW gale. The barometer had then fallen to 29.53. At sea NW of Luzon it blew heavily from the N with a high NNE sea.—In the evening the centre entered Northern Luzon and crossed it during the night with most disastrous consequences to the inhabitants.

At 10 a. on the 8th the centre appears to have been about 19° N, 121° E. Light winds and fine and dry weather prevailed along the Coast of China. In Luzon it was overcast and light rain fell, while light S and SW breezes were reported from Manila and Bolinao. At S. Cape it blew a strong NE breeze in the afternoon, the weather became overcast and misty, drizzling rain fell and the mercury in the barometer descended to 29.68 at 9 p. On the same morning it blew a moderate NE gale at Keelung, but the barometer fell only a few hundredths. It appears therefore now most likely that the centre of this typhoon took a NE course. At 10 a. on the 9th it may possibly have been about 23° N, 126° E, but for want of observations it is impossible to follow this typhoon.

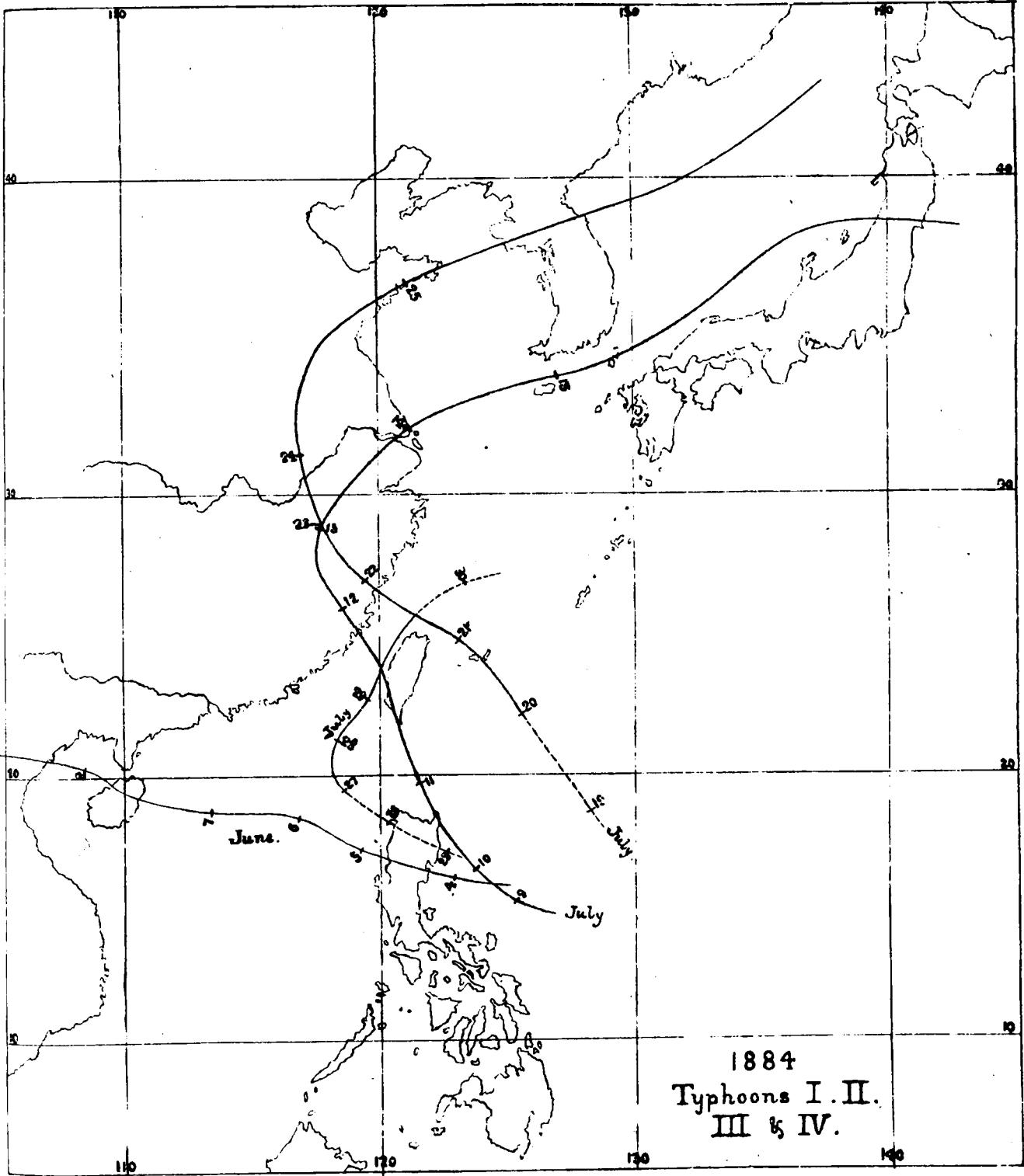
Comparatively little reference to observations made on board ship has been made in the preceding pages. Unequalled facilities are offered here for collecting such and if all the observations forwarded by commanders of men-of-war or merchant vessels or copied from the logbooks of ships passing through the harbour were to have been inserted, the size of this report would have exceeded the limits. Nor has as a rule any reference been made to the damage caused by typhoons on board or on shore, the description of which lies outside the subject of meteorology proper and may be read in the newspapers. Were all this to have been included, the report would have swelled into a stout volume.

The paths of the typhoons are represented on the following six plates copied by a native photograper from the original drawings, the four first of which were finished more than a year ago. The different portions of the curves are of very different degrees of accuracy as will appear from the text. Where the path for want of sufficient observations is not known beyond doubt, the curve is dotted. The year and numbers of the typhoons are printed in the corner. The months are printed at the beginning of or elsewhere near the curve and the dates are inserted at the position of the centre at 10 a. on each day. On the first plate the names of the months in which the first and the second typhoons appear have been entered erroneously. The first typhoon should have June not July affixed, and the second should have July not June affixed.

Hongkong Observatory, 31st August, 1886.

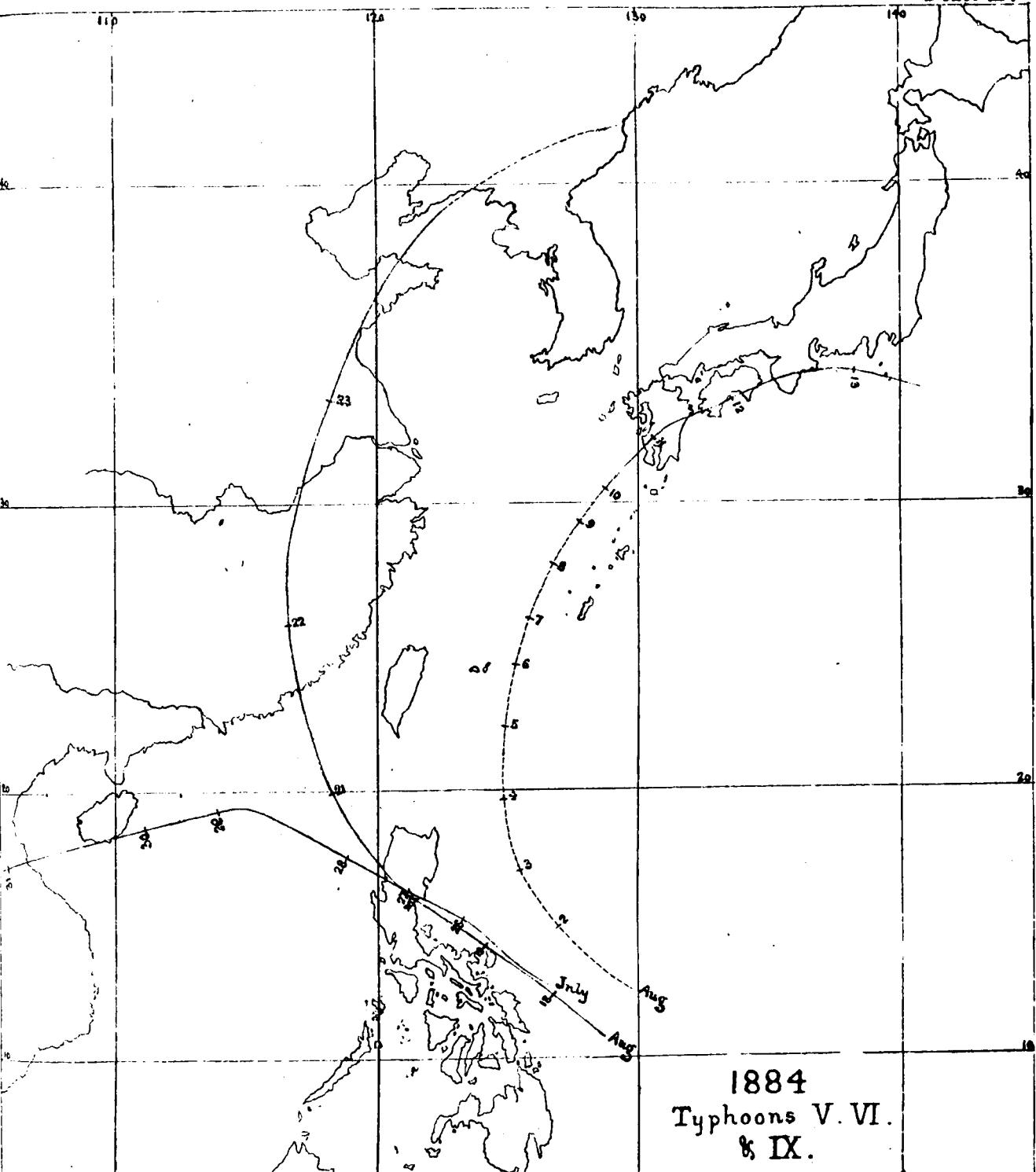
W. DOBERCK,
Government Astronomer

Plate I.



Hong Kong Observatory.

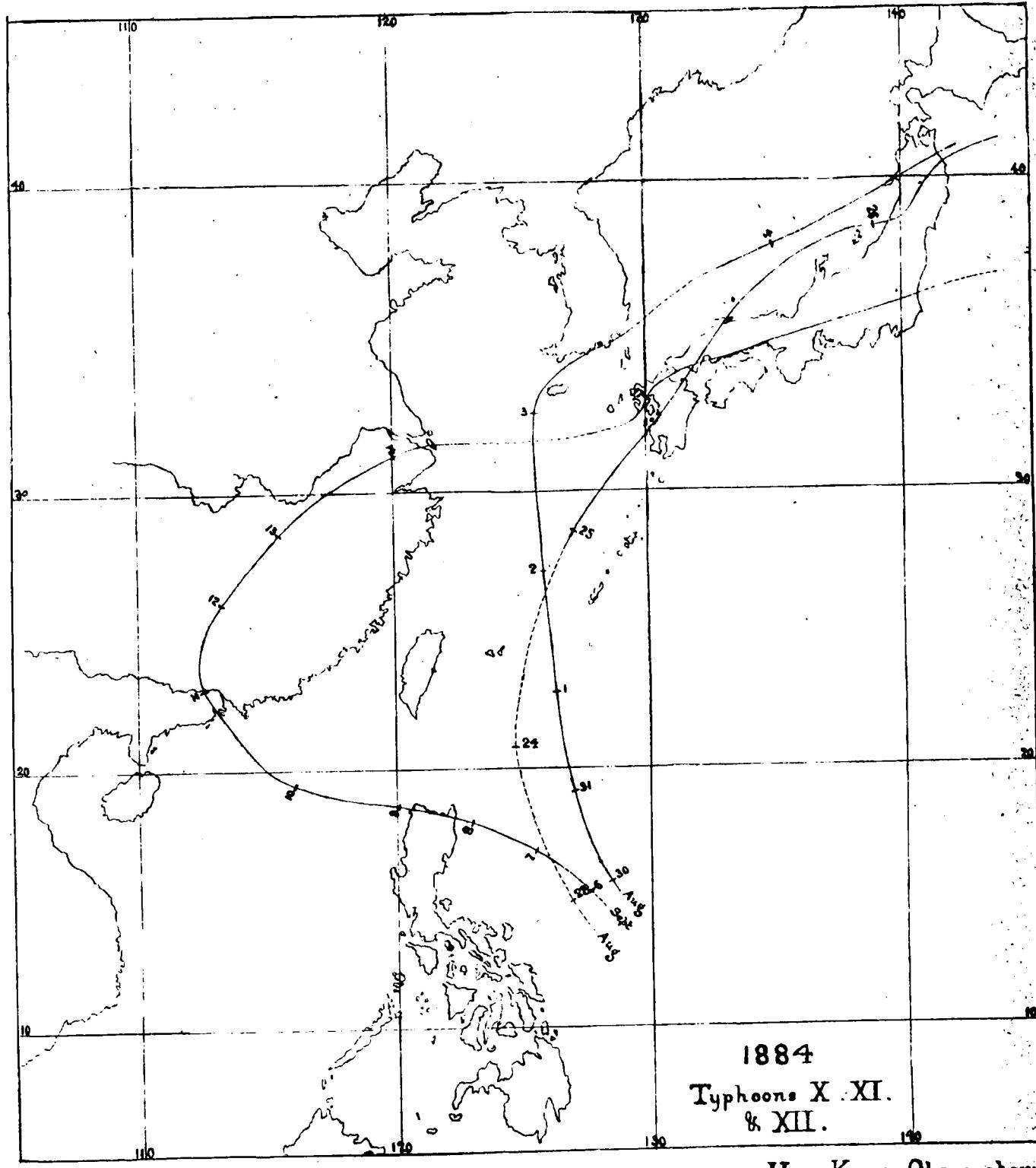
Plate II.



1884
Typhoons V. VI.
& IX.

Hong Kong Observatory.

Plate III.



Hong Kong Observatory

Plate IV.

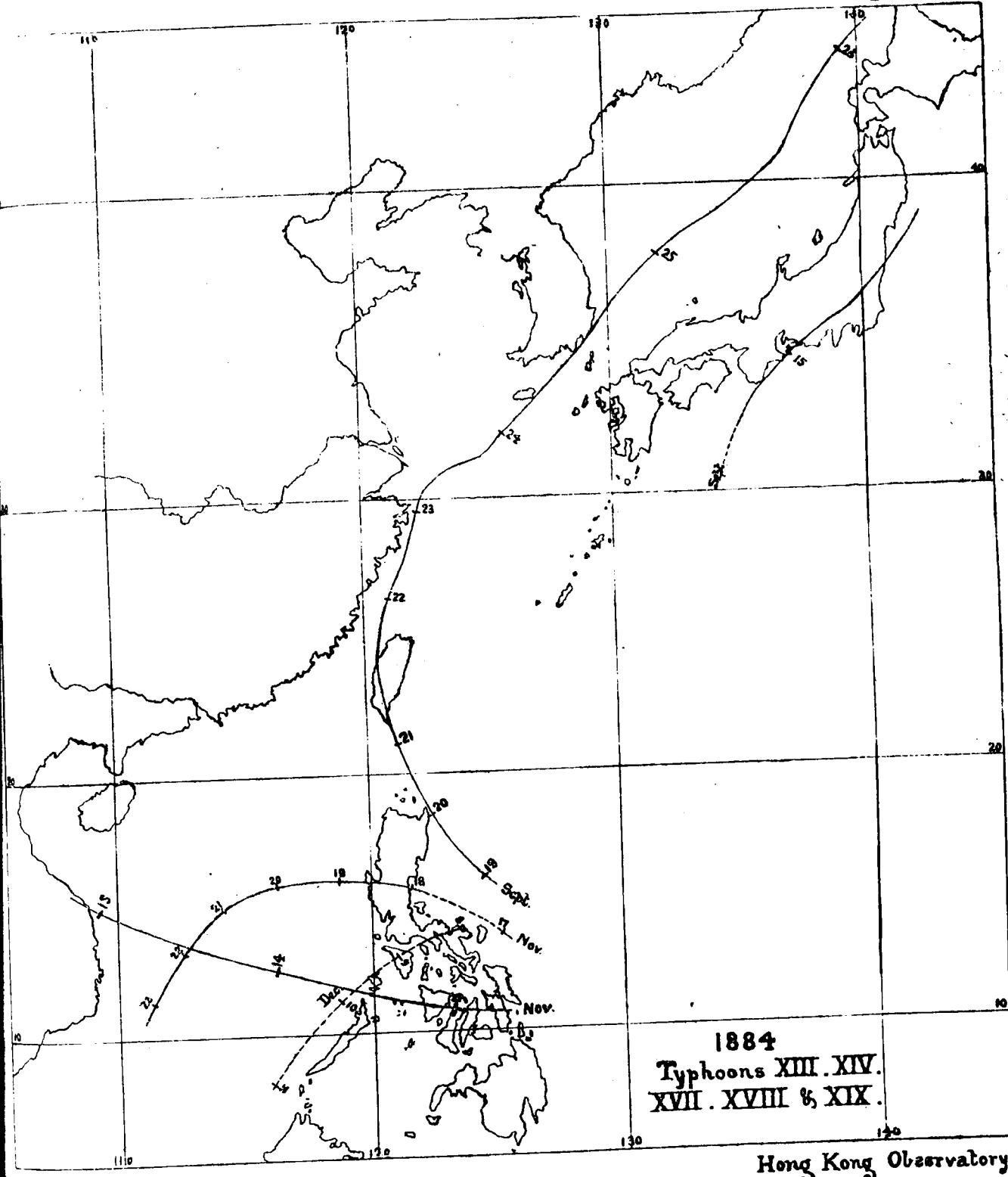


Plate V.

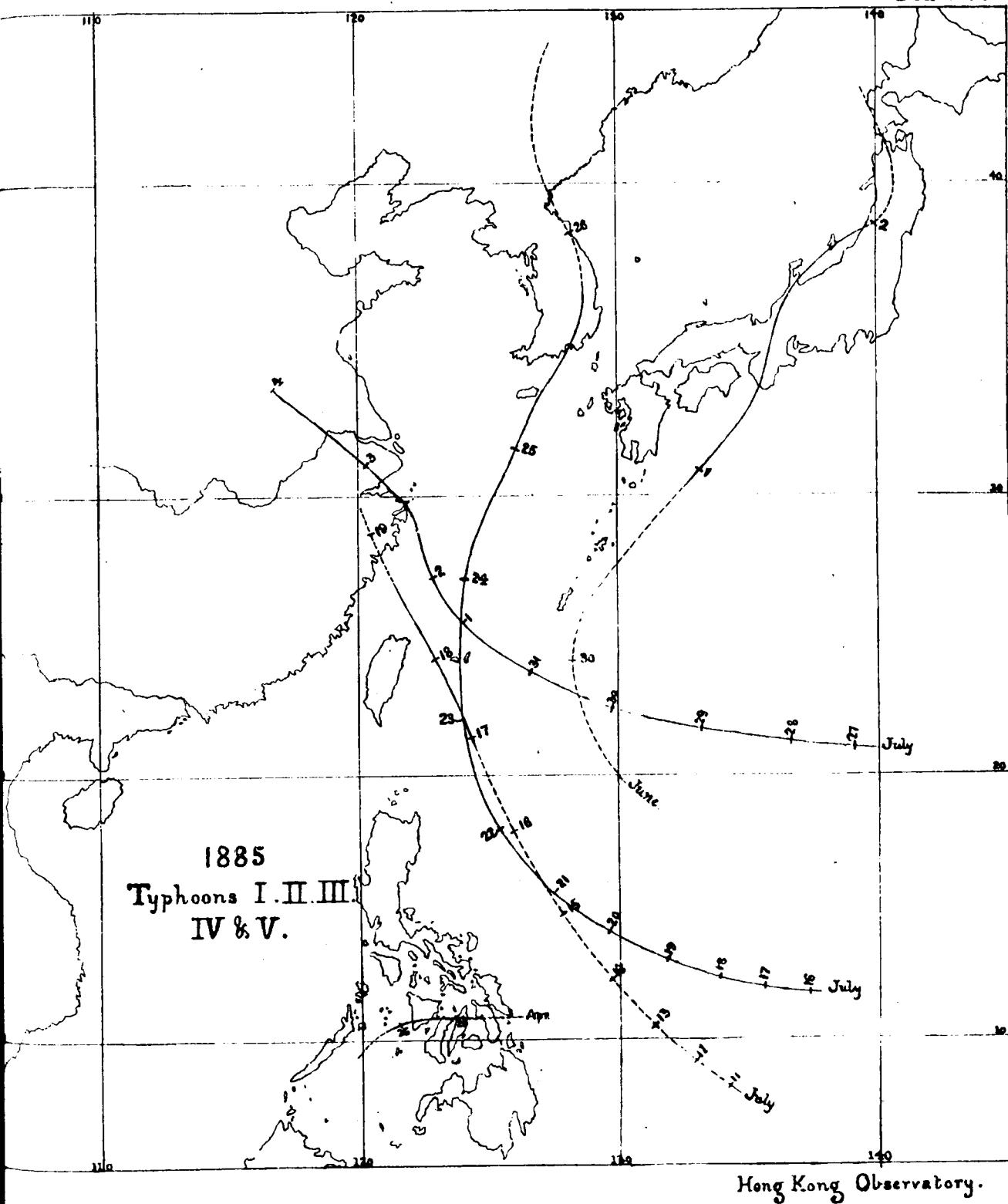
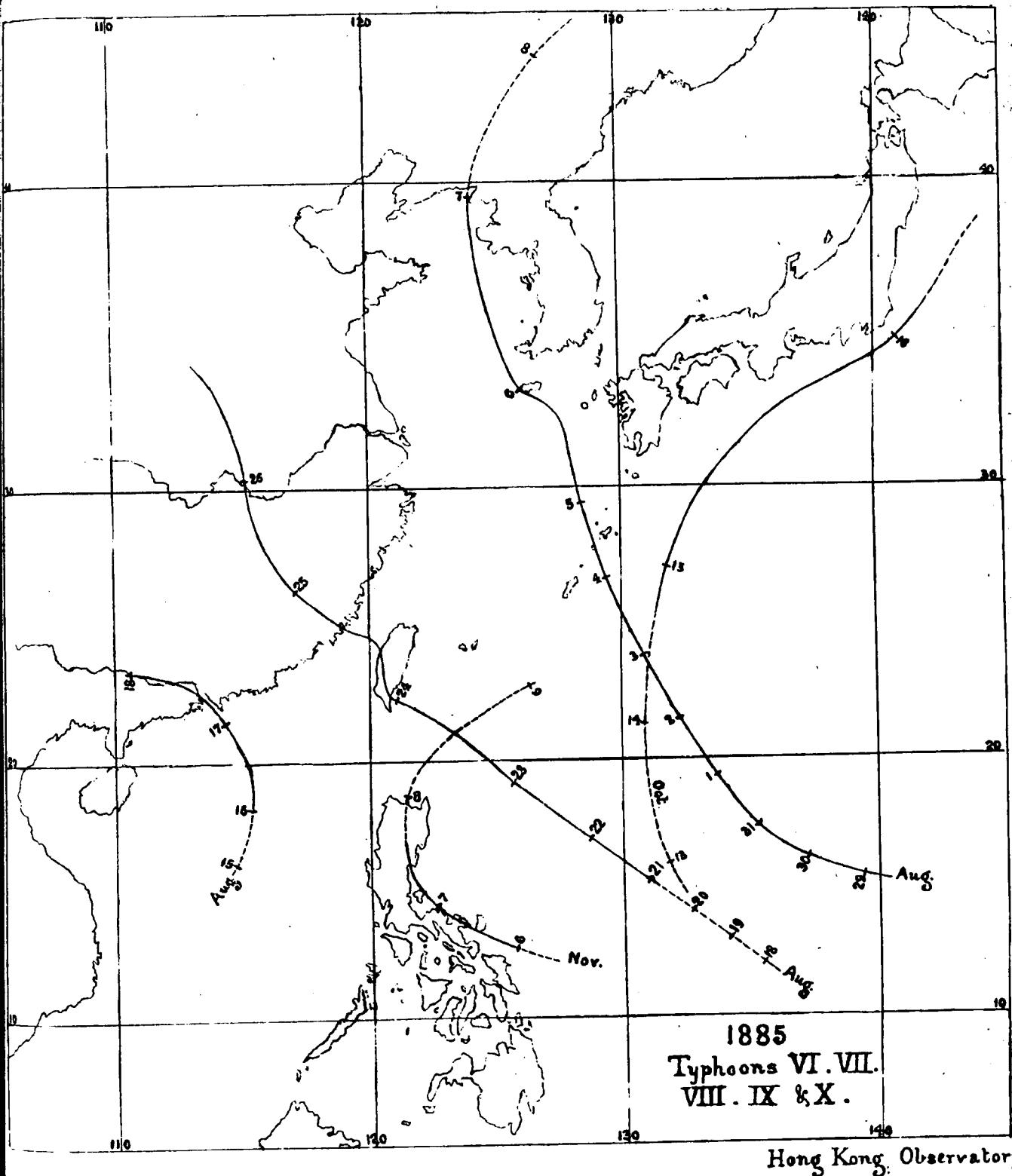


Plate VI.



Appendix C.

HONGKONG OBSERVATORY.

Magnetic Observations made during the year 1886.

The observations of Declination and Horizontal Force were made with the Unifilar Magnetometer, Elliott Brothers No. 55, and the Dips were observed with Dip-circle, Dover No. 71.

The methods adopted in making the observations and in determining and applying the corrections are explained in *Appendix G. of Obs. and Res. made in 1885*: "On the verification of the Unifilar Magnetometer Elliott Brothers, No. 55" The value of $\log \pi^2 K$ was 3.44940 at 20° Cent., and the value of P was + 9.165. The mean value of the magnetic moment of the vibrating needle was 0.49904 in English Units and 651.54 in C. G. S. Units.

The times of vibration exhibited in the table are each derived from 12 observations of the time occupied by the magnet in making 100 vibrations, corrections having been applied for rate of chronometer and arc of vibration.

The observations of Horizontal Force are expressed in C. G. S. Units (one centimeter, one gramme, one second) but the monthly synopsis exhibits X, the Horizontal, as well as Y, the Vertical, and the Total Forces, which have been computed by aid of the observed Dips, and their values are also given in English Units (one foot, one grain, one second) and in Gauss's Units (one millimeter, one milligramme, one second).

From the observations made by Captain Maclear at the end of 1874 compared with the mean of the results obtained in 1885 and 1886, it is seen that the Declination (East) is: $0^\circ 44' 05'' - 1' 05''$ (t-1886.0), the Dip (North): $32^\circ 25' 95'' + 0' 50''$ (t-1886.0) and the Total Force (English Units): $9.2613 + 0.00275$ (t-1886.0).

OBSERVATIONS OF MAGNETIC DECLINATION AND DIP.

1886.	H.K.M.T.	Declination, East.	Observer.	H.K.M.T.	Dip, North.	Needle.	Observer.
January,	18 ^h 2 ^m 10 ^s p.	0° 43' 26"	W.D.	15 ^h 4 ^m 7 ^s p.	32° 28' 25 27.05	No. 1 2	F.G.F.
February,	17 2 56 p.	41 51	F.G.F.	18 3 35 p.	26.77	1	"
	18 2 25 p.	41 59	"		26.62	2	"
March,	15 2 32 p.	43 5	"	13 3 10 p.	27.21	1	"
					24.42	2	"
April,	15 2 29 p.	42 48	"	17 3 28 p.	26.77	1	"
					24.50	2	"
May,	14 2 25 p.	43 21	"	15 3 35 p.	26.94	1	"
					27.58	2	"
June,	15 2 35 p.	41 27	"	16 3 28 p.	26.18	1	"
					23.77	2	"
July,	14 2 41 p.	42 41	"	19 3 28 p.	24.58	1	"
					25.96	2	"
August,	16 2 39 p.	41 57	"	14 3 35 p.	29.43	1	"
					26.86	2	"
September,	14 2 37 p.	41 50	"	15 3 25 p.	23.25	1	"
					24.43	2	"
October,	15 2 35 p.	44 58	"	16 3 17 p.	24.75	1	"
					25.47	2	"
November,	18 2 30 p.	43 7	W.D.	16 3 5 p.	23.65	1	W.D.
					22.05	2	"
				18 4 17 p.	22.75	1	M.A.
				19 3 32 p.	23.85	2	"
December,	14 2 31 p.	44 49	F.G.F.	15 3 15 p.	23.77	1	F.G.F.
				"	22.02	2	"

OBSERVATIONS OF HORIZONTAL MAGNETIC FORCE.

DATE. 1886.	H.K.M.T.	Time of one Vi- bration.	Tem- perature, Cent.	Log m X.	Value of m.	H.K.M.T.	Distance in Cen- ti- meters.	Tem- perature, Cent.	Deflec- tion.	Log \bar{m} X Mean.	Value of X.	Observer
January 18,...	2 ^h 34 ^m 1 ^s .	3.4534	18°.7	2.37372	655.98	3 ^h 1 ^m p.	30 40	17°.9 12.5	7°46' 28".5 7 47 34	3.26005 3.26044	0.36044 0.36003	W.B.
February 17,...	3 19 p.	3.4520	12.6	2.37309	655.80	3 55 p.	30 40	12.5	3 15 26 3 16 10			F.G.E.
March 15,...	2 54 p.	3.4558	21.6	2.37365	656.30	3 30 p.	30 40	22.4	7 47 12.5 3 14 51.5	3.26055	0.36021	
April 16,...	3 8 p.	3.4575	20.25	2.37294	654.97	3 15 p.	30 40	19.7	7 45 31.5 3 15 3.5	3.25950	0.36035	
May 14,...	2 44 p.	3.4626	28.5	2.37346	655.08	3 22 p.	30 40	26.9	7 43 31 3 14 21	3.25910	0.36072	
June 15,...	2 59 p.	3.4664	23.9	2.37258	653.57	3 27 p.	30 40	27.6	7 42 12 3 13 47	3.25799	0.36082	
July 14,...	3 15 p.	3.4695	29.3	2.37186	652.10	3 43 p.	30 40	29.1	7 40 27 3 13 7	3.25677	0.36103	
August 16,...	3 11 p.	3.4771	28.8	2.36980	650.06	3 37 p.	30 40	28.0	7 40 4 3 12 55	3.25610	0.36045	
September 14,...	3 4 p.	3.4837	31.1	2.36852	648.56	3 35 p.	30 40	29.9	7 33 37 3 12 32	3.25537	0.36023	
October 15,...	3 3 p.	3.4837	26.6	2.36799	646.59	3 32 p.	30 40	25.9	7 37 51 3 11 57	3.25327	0.36088	
November 21,...	2 31 p.	3.4862	25.8	2.36744	645.15	2 57 p.	30 40	23.3	7 36 38 3 11 24	3.25188	0.36123	W.B.
December 14,...	3 0 p.	3.4836	18.5	2.36686	644.29	3 38 p.	30 40	17.6	7 37 20 3 11 29	3.25129	0.36122	F.G.E.

RESULTS OF MAGNETIC OBSERVATIONS IN 1886.

Month. 1886.	Declination, East.	Dip, North.	MAGNETIC FORCE.								
			ENGLISH UNITS.			METRIC UNITS.			C. G. S. UNITS.		
			X	Y	Total Force	X	Y	Total Force	X	Y	Total Force
January,....	0° 43' 26"	32° 27' 39"	7.8172	4.9727	9.2646	3.6044	2.2928	4.2718	0.36044	0.22928	0.42718
February,...	41 55	26 42	7.8082	4.9639	9.2522	3.6003	2.2887	4.2661	0.36003	0.22887	0.42661
March,.....	43 5	25 49	7.8122	4.9635	9.2557	3.6021	2.2886	4.2677	0.36021	0.22886	0.42677
April,.....	42 48	25 38	7.8152	4.9650	9.2590	3.6035	2.2893	4.2691	0.36035	0.22893	0.42691
May,.....	43 21	27 16	7.8235	4.9753	9.2715	3.6072	2.2941	4.2749	0.36072	0.22941	0.42749
June,....	41 27	24 58	7.8255	4.9692	9.2700	3.6082	2.2912	4.2743	0.36082	0.22912	0.42743
July,.....	42 41	25 16	7.8302	4.9731	9.2760	3.6103	2.2931	4.2770	0.36103	0.22931	0.42770
August,....	41 57	28 9	7.8175	4.9744	9.2660	3.6045	2.2936	4.2724	0.36045	0.22936	0.42724
September,..	41 50	23 59	7.8125	4.9573	9.2527	3.6023	2.2857	4.2663	0.36023	0.22857	0.42663
October,....	41 58	25 7	7.8267	4.9705	9.2717	3.6088	2.2918	4.2750	0.36088	0.22918	0.42750
November,.	43 7	23 4	7.8343	4.9688	9.2772	3.6123	2.2910	4.2776	0.36123	0.22910	0.42776
December,.	44 49	22 54	7.8343	4.9682	9.2768	3.6122	2.2907	4.2774	0.36122	0.22907	0.42774
Mean,..	0° 42' 57"	32° 25' 32"	7.8214	4.9685	9.2661	3.6063	2.2909	4.2725	0.36063	0.22909	0.42725

W. DOBERCK,
Government Astronomer.

Hongkong Observatory, 16th December, 1886.